

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

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IN RE: NATIONAL PRESCRIPTION MDL No. 2804  
OPIATE LITIGATION

Case No.  
17-md-2804

Judge Dan Aaron  
Polster

This document relates to:  
The County of Summit, Ohio, et al. v. Purdue  
Pharma L.P., et al.

Case No. 18-OP-45090 (N.D. Ohio)

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Videotaped Deposition of
STEVE PERCH
October 18, 2018
9:00 a.m.

Taken at:

Brennan Manna & Diamond
75 East Market Street
Akron, Ohio

Stephen J. DeBacco, RPR

<p style="text-align: right;">Page 2</p> <p>1 APPEARANCES:</p> <p>2</p> <p>3 On behalf of the City of Akron, Summit County, and the Witness:</p> <p>4</p> <p>5 Motley Rice LLC, by ANNE MCGINNESS KEARSE, ESQ. KRISTEN M. HERMIZ, ESQ. 28 Bridgeside Boulevard Mt. Pleasant, South Carolina 29464 (843) 216-9140 akearse@motleyrice.com (843) 216-9390 khermiz@motleyrice.com</p> <p>9</p> <p>10 On behalf of McKesson Corporation, via teleconference:</p> <p>11</p> <p>12 Covington & Burling LLP, by PATRICK R. CAREY, ESQ. One Front Street San Francisco, California 94111-5356 (415) 591-7093 pcarey@cov.com</p> <p>15</p> <p>16 On behalf of Walmart, Inc.:</p> <p>17</p> <p>18 Jones Day, by EDWARD M. CARTER, ESQ. BRANDY H. RANJAN, ESQ. 325 John H. McConnell Boulevard Suite 600 Columbus, Ohio 43216-5017 (614) 281-3906 emcarter@jonesday.com (614) 469-3939 branjana@jonesday.com ~ ~ ~ ~ ~</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 4</p> <p>1 APPEARANCES, Continued:</p> <p>2</p> <p>3 On behalf of Johnson & Johnson and Janssen Pharmaceuticals, Inc.:</p> <p>4</p> <p>5 Tucker Ellis LLP, by JUSTIN E. RICE, ESQ. 950 Main Avenue North, Suite 1100 Cleveland, Ohio 44113 (216) 696-3670 justin.rice@tuckerellis.com</p> <p>7</p> <p>8 On behalf of AmerisourceBergen:</p> <p>9</p> <p>10 Jackson Kelly PLLC, by A.L. EMCH, ESQ. 1600 Laidley Tower P.O. Box 553 Charleston, West Virginia 25332 (304) 340-1172 aemch@jacksonkelly.com</p> <p>13</p> <p>14 -and-</p> <p>15 Jackson Kelly PLLC, by SANDRA K. ZERRUSEN, ESQ. 50 South Main Street, Suite 201 Akron, Ohio 44308 (330) 252-9060 skzerrusen@jacksonkelly.com</p> <p>17</p> <p>18 On behalf of Cephalon, Inc.; Teva Pharmaceuticals USA, Inc.; Actavis, LLC; Actavis Pharma, Inc. F/k/a Watson Pharma, Inc.; and Watson Laboratories, Inc., via teleconference:</p> <p>20</p> <p>21 Morgan, Lewis & Bockius LLP, by PAMELA HOLLY, ESQ. 101 Park Avenue New York, New York 10178-0060 (212) 309-6864 pamela.holly@morganlewis.com</p> <p>24</p> <p>25 ~ ~ ~ ~ ~</p>
<p style="text-align: right;">Page 3</p> <p>1 APPEARANCES, Continued:</p> <p>2</p> <p>3 On behalf of Cardinal Health, Inc.:</p> <p>4</p> <p>5 Williams & Connolly LLP, by MIRANDA PETERSEN, ESQ. 725 12th Street Northwest Washington, D.C. 20005 (202) 434-5686 mpetersen@wc.com</p> <p>7</p> <p>8 On behalf of Prescription Supply, Inc.:</p> <p>9</p> <p>10 Pelini, Campbell & Williams, by GIANNA M. CALZOLA-HELMICK, ESQ. Bretton Commons, Suite 400 8040 Cleveland Avenue Northwest North Canton, Ohio 44720 (330) 305-6400 giannac@pelini-law.com</p> <p>12</p> <p>13 On behalf of Endo Pharmaceuticals, Inc., Endo Health Solutions, Inc., Par Pharmaceuticals, Inc. and Par Pharmaceutical Companies, Inc.:</p> <p>15</p> <p>16 Arnold & Porter Kaye Scholer LLP, by ANGEL TANG NAKAMURA, ESQ. 777 South Figueroa Street 44th Floor Los Angeles, California 90017-5844 (213) 243-4094 angel.nakamura@arnoldporter.com ~ ~ ~ ~ ~</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 5</p> <p>1 APPEARANCES, Continued:</p> <p>2</p> <p>3 On behalf of Purdue Pharma L.P., Purdue Pharma, Inc., and The Purdue Frederick Company:</p> <p>4</p> <p>5 Dechert LLP, by MARK S. CHEFFO, ESQ. 3 Bryant Park 1095 Avenue of the Americas New York, New York 10036-6797 (212) 698-3814 markcheffo@dechert.com</p> <p>7</p> <p>8 -and-</p> <p>9 Dechert LLP SARA B. ROITMAN, ESQ. 35 West Wacker Drive, Suite 3400 Chicago, Illinois 60601-1634 (312) 646-5800 sara.roitman@dechert.com</p> <p>12</p> <p>13 On behalf of Allergan Finance, LLC, via Teleconference:</p> <p>14</p> <p>15 Kirkland & Ellis LLP, by PAUL J. WEEKS, ESQ. 655 Fifteenth Street, Northwest Washington, D.C. 20005-5793 (202) 879-5148 paul.weeks@kirkland.com</p> <p>17</p> <p>18 On behalf of HBC Service Company, Inc., via teleconference:</p> <p>19</p> <p>20 Marcus & Shapira LLP, by JAMES F. ROSENBERG, ESQ. One Oxford Centre, 35th Floor Pittsburgh, Pennsylvania 15219 (412) 338-4683 rosenberg@marcus-shapira.com</p> <p>22</p> <p>23 ALSO PRESENT:</p> <p>24</p> <p>25 Nick Cummings, Motley Rice Jim Torok, Legal Videographer</p>

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<p style="text-align: right;">Page 10</p> <p>1 THE VIDEOGRAPHER: We're on the 2 record. 3 Today's date is October 18, 2018. 4 The time is 9:00 a.m. We're here to take the 5 videotaped deposition of Steve Perch in the 6 case of National Prescription Opiate 7 Litigation, MDL No. 2804, Case No. 17-md-2804, 8 to be heard in the United States District 9 Court, Northern District of Ohio, Eastern 10 Division. 11 Will counsel please state your name 12 for the record. 13 MS. KEARSE: Anne Kearse, County of 14 Summit and City of Akron. 15 MS. HERMIZ: Kristen Hermiz with 16 Motley Rice on behalf of the County of Summit 17 and the City of Akron. 18 MS. TANG: Angel Tang of Arnold & 19 Porter on behalf of Defendants Endo and Par 20 Pharmaceuticals. 21 MS. RANJAN: Brandy Ranjan from 22 Jones Day on behalf of Walmart. 23 MS. CALZOLA: Gianna Calzola from 24 Pelini Campbell & Williams on behalf of 25 Prescription Supply, Inc.</p>	<p style="text-align: right;">Page 12</p> <p>1 Kirkland & Ellis on behalf of Allergan Finance. 2 MS. HOLLY: Pam Holly, Morgan 3 Lewis, on behalf of Teva Pharmaceuticals. 4 MR. CHEFFO: Okay, sounds -- 5 THE VIDEOGRAPHER: Please swear in 6 the witness. 7 STEVE PERCH, of lawful age, called for 8 examination as provided by the Ohio Rules of 9 Civil Procedure, being by me first duly sworn, 10 as hereinafter certified, deposed and said as 11 follows: 12 EXAMINATION OF STEVE PERCH 13 BY MR. CHEFFO: 14 Q. Good morning, Mr. Perch. As you 15 heard -- it's Mr. Perch; is that -- did I say 16 that right? 17 A. Correct. 18 Q. Thank you. My name is Mark Cheffo, 19 and I'll be asking you some questions this 20 morning. Probably after me, some of my 21 colleagues may have some questions, but we'll 22 see how much we can cover this morning. 23 You understand that you're under 24 oath today? 25 A. I -- I do.</p>
<p style="text-align: right;">Page 11</p> <p>1 MR. RICE: Justin Rice from Tucker 2 Ellis on behalf of Johnson & Johnson and 3 Janssen. 4 MS. PETERSON: Miranda Peterson 5 with Williams & Connolly on behalf of Cardinal 6 Health, Inc. 7 MR. CARTER: Ed Carter for Walmart. 8 MS. ZERRUSEN: Sandy Zerrusen from 9 Jackson Kelly for AmerisourceBergen Drug 10 Corporation. 11 MR. EMCH: Al Emch, Jackson Kelly, 12 AmerisourceBergen Drug Corporation. 13 MS. ROITMAN: Sara Roitman for 14 Purdue. 15 MR. CHEFFO: And Mark Cheffo for 16 Purdue. 17 Nick Cummings in my office is here, 18 so he'll make an appearance as Motley Rice. 19 THE VIDEOGRAPHER: People on the 20 phone? 21 MR. CHEFFO: Can the folks on the 22 phone please do it one more time for us? 23 MR. ROSENBERG: James Rosenberg, 24 Marcus & Shapira, for HBC. 25 MR. WEEKS: And Paul Weeks with</p>	<p style="text-align: right;">Page 13</p> <p>1 Q. And have you been deposed before? 2 A. I have. 3 Q. So you generally know the rules, 4 and you have very good lawyers, but just a few 5 kind of housekeeping ground rules. 6 If there's anything that I ask 7 you -- that I'm sure will happen from time to 8 time -- that you don't understand or it's not 9 clear, will you just let me know and I'll happy 10 to rephrase it? 11 A. Okay. 12 Q. And similarly, if you need a break 13 at any time, for any reason, just, you know, 14 answer the pending question and then just let 15 us know and we'll take a break. 16 A. Okay. 17 Q. Would you be good enough to tell us 18 what you did to prepare for today's deposition? 19 A. Went to Florida. Just got back. 20 Nothing. 21 Q. Did you look at any documents? 22 A. I take that back. I did meet with 23 the attorneys this morning for about 15, 20 24 minutes and a previous time for a couple hours. 25 Q. Okay. And I don't want you to tell</p>

<p style="text-align: right;">Page 14</p> <p>1 me anything that you talked to them about, but 2 was it these two attorneys here? 3 A. This morning it was. And I think 4 before, I think they were both present as well. 5 Q. Okay. Were there any other 6 non-attorneys there? 7 A. I don't think so. 8 Q. And did you look at any documents 9 at all in connection with this to either 10 refresh your recollection or just orient 11 yourself? 12 A. They showed me a couple documents. 13 One was a letter about not destroying any 14 evidence. I'm assuming from you guys. 15 Q. Had you seen that before? 16 A. Yeah. I got an e-mail on it. 17 Q. Okay. 18 A. And a couple of the articles that 19 were published with my name on it. 20 Q. Okay. Anything else? 21 A. Not that I can recall. 22 Q. All right. Would you -- could you 23 give us an overview of your educational 24 background? 25 A. My undergrad degree was a BS in</p>	<p style="text-align: right;">Page 16</p> <p>1 that typically in connection with your 2 professional work? 3 A. Typically, yes. 4 Q. So you're called upon -- we'll talk 5 about it, but I think you actually serve kind 6 of a toxicology function for a number of 7 different entities; is that right? 8 A. I do. 9 Q. And from time to time, those 10 various entities, I take it, call upon you or 11 ask you to assist them or provide testimony on 12 their behalf? 13 A. Yes. 14 Q. Would you tell us what you -- I 15 mean, currently, who -- who is it that you -- 16 you currently work for? 17 A. I currently work -- my primary job 18 is with the medical examiner's office in Summit 19 County. 20 Q. Okay. And I see from your CV you 21 also do some work with the police, the Akron 22 Police Department? 23 A. Correct. Four kids, four college 24 educations, need more than one job. 25 I work with the Akron Police</p>
<p style="text-align: right;">Page 15</p> <p>1 biology from the University of Akron. 2 My toxicology training was through 3 a special program by -- set up by Akron City 4 Hospital with the Medical College of Ohio, 5 Dr. Forney Jr. 6 I've taken quite a few postgraduate 7 classes. A year of pharmacology at Northeast 8 Ohio College of Medicine, a variety of 9 additional classes, seminars, et cetera. 10 Q. And the toxicology training before 11 the postgraduate, was -- did that -- did you 12 wind up with a master's or a Ph.D., or was it a 13 certification? 14 A. No. It was a -- it was a 15 non-degree program back in the early '80s, I'm 16 guessing. Like '81 maybe. This was a long 17 time ago. I don't know how many toxicology 18 programs there were, if any, in Ohio at that 19 time. 20 Q. And in the context that you've 21 testified before in depositions -- well, let me 22 ask you this. Have you also testified at 23 trials? 24 A. I have. 25 Q. And your providing testimony, is</p>	<p style="text-align: right;">Page 17</p> <p>1 Department. I set up their forensic lab over 2 20 years ago, and I still currently perform -- 3 it's a contract employee, so I do some work 4 there. 5 I also am contracted with Oriana 6 House as their lab director. 7 Q. So is your employment, I take it, 8 with the Summit County medical examiner, is 9 that a full-time position? 10 A. That's a full-time position. 11 Q. And then to the extent that you 12 work with Oriana or the Akron Police 13 Department, that's kind of above and beyond on 14 your own time? 15 A. Correct. 16 Q. In a typical week or month, or 17 whatever it's easiest for you to differentiate, 18 how much time do you think you'd spend at the 19 police department or the police lab or Oriana? 20 A. With the police department, I 21 typically bill them on the average of about 120 22 hours a year. 23 Typically on weekends with the 24 Oriana House, not much time at all. Maybe a 25 couple hours a week at most.</p>

5 (Pages 14 - 17)

<p style="text-align: right;">Page 18</p> <p>1 The main reason they hired me is</p> <p>2 they wanted to become certified by CLIA,</p> <p>3 Clinical Lab Improvement Act, and they needed a</p> <p>4 certain individual that had the requirements to</p> <p>5 be their lab director.</p> <p>6 Initially, it was quite a bit of</p> <p>7 work to install all the requirements of CLIA.</p> <p>8 Over the years, basically, it's just a kind of</p> <p>9 overseeing role.</p> <p>10 Q. And are they certified now?</p> <p>11 A. They are.</p> <p>12 Q. Is the lab at the police department</p> <p>13 CLIA certified?</p> <p>14 A. No. CLIA -- they don't need to be</p> <p>15 CLIA certified. They don't bill Medicare, any</p> <p>16 of the government functions.</p> <p>17 Q. I see. Is the same true for the</p> <p>18 Summit County? They don't -- they're not, and</p> <p>19 they don't need to be?</p> <p>20 A. No, they don't need to be either.</p> <p>21 Q. And just as a general matter, is --</p> <p>22 what's the general nature -- in other words,</p> <p>23 what -- if the Summit County medical</p> <p>24 department, medical examiner's office, wanted</p> <p>25 to be CLIA certified, do they have the</p>	<p style="text-align: right;">Page 20</p> <p>1 medical department, but to the extent that, you</p> <p>2 know, you're talking about the police</p> <p>3 department or some other organization, it would</p> <p>4 be great if you could try to differentiate.</p> <p>5 A. Sure.</p> <p>6 Q. I'll try and ask you if it's not</p> <p>7 clear, but just so that we're all on the same</p> <p>8 page, that would be helpful.</p> <p>9 And when did you first start --</p> <p>10 well, it looks like here you first started</p> <p>11 working at the Summit County medical examiner</p> <p>12 in May 2001 and you worked to the present.</p> <p>13 Does that sound right?</p> <p>14 A. Correct.</p> <p>15 Q. And you also worked -- started</p> <p>16 working at Oriana in around 2000 to the</p> <p>17 present?</p> <p>18 A. Correct.</p> <p>19 Q. And then the Akron Police</p> <p>20 Department was 1995 to the present?</p> <p>21 A. Correct.</p> <p>22 Q. Is that right?</p> <p>23 So is it fair to say that -- I</p> <p>24 don't know if you had a chance to look at this</p> <p>25 recently. You think that this -- this CV is</p>
<p style="text-align: right;">Page 19</p> <p>1 qualifications to meet those -- those tests?</p> <p>2 A. They do, but I don't think CLIA</p> <p>3 would certify them. Again, CLIA certification</p> <p>4 is primarily if you're going to bill for</p> <p>5 government services, for clinical services.</p> <p>6 Q. I see. Are there other</p> <p>7 certifications that labs aspire to, can get,</p> <p>8 are typical?</p> <p>9 A. Yeah. We are certified by Ohio</p> <p>10 Department of Health, drug and alcohol testing</p> <p>11 division, for forensic testing.</p> <p>12 I have a director's permit for both</p> <p>13 the Akron Police Department as well as Summit</p> <p>14 County medical examiner's office.</p> <p>15 I also have a couple of different</p> <p>16 certifications for myself. One is in</p> <p>17 toxicology, through the National Registry in</p> <p>18 Clinical Chemistry, and one is in chemistry,</p> <p>19 through the American Society of Clinical</p> <p>20 Pathology.</p> <p>21 Q. And I appreciate you've -- you've</p> <p>22 just done it, which is very helpful to, I</p> <p>23 think, us all, is most of my questions are</p> <p>24 obviously going to be talking about things in</p> <p>25 your work in connection with the Summit County</p>	<p style="text-align: right;">Page 21</p> <p>1 accurate?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. What -- what is your -- how</p> <p>4 would you describe your role with the Summit</p> <p>5 County medical examiner's office?</p> <p>6 A. My role is as an analyst,</p> <p>7 primarily. I actually do the physical testing</p> <p>8 of all the samples.</p> <p>9 Q. Do you have an assistant?</p> <p>10 A. I do not. Not a permanent</p> <p>11 assistant. Initially, I would do summer</p> <p>12 internships for doctoral candidates. I've had</p> <p>13 a few from Marshall University, West Virginia</p> <p>14 University, Ohio Northern. They would -- I</p> <p>15 would give them a project during the summer.</p> <p>16 They would write a paper on it, try to get it</p> <p>17 published, that kind of stuff.</p> <p>18 Then I got pretty busy, so lately</p> <p>19 I've had some summer help. Again, typically a</p> <p>20 college student. And we actually pay them now.</p> <p>21 Q. And is there another person who</p> <p>22 either performs the same function as you or</p> <p>23 reports to you?</p> <p>24 A. No.</p> <p>25 Q. So you're the only toxicologist?</p>

<p style="text-align: right;">Page 22</p> <p>1 A. I'm it.</p> <p>2 Q. If you are out of the office or on</p> <p>3 vacation, is there someone that covers for you?</p> <p>4 A. No.</p> <p>5 Q. And we can break it down, but</p> <p>6 you've been doing this for a long time, so it</p> <p>7 might be easier if I just ask you kind of an</p> <p>8 open-ended question, which is, you know, maybe</p> <p>9 you could take us through the process of how it</p> <p>10 typically works with a case.</p> <p>11 So in other words, you know, where</p> <p>12 there's a decedent that presumably comes to the</p> <p>13 Medical Examiner's office, and to the extent</p> <p>14 that there's a decision point about whether tox</p> <p>15 screening should be done or shouldn't be done,</p> <p>16 how that -- how that works.</p> <p>17 A. The decision on should they order a</p> <p>18 tox or not is up to the pathologist.</p> <p>19 Let me back up one step. I do</p> <p>20 work -- quite a bit of work for our county,</p> <p>21 obviously, but I do a lot of external clients</p> <p>22 that we bill. Probably about equal amount of</p> <p>23 cases.</p> <p>24 Talking about our clients in Summit</p> <p>25 County -- clients' cases, the pathologist will</p>	<p style="text-align: right;">Page 24</p> <p>1 other than a request for it, do you receive any</p> <p>2 other information? In other words, is there a</p> <p>3 format that says, you know, gunshot wound, drug</p> <p>4 overdose, suspected homicide?</p> <p>5 A. Yes. I get a copy of the</p> <p>6 investigator's report that details what the</p> <p>7 investigator observed at the scene, if they</p> <p>8 found any illicit drugs or prescription drugs</p> <p>9 or what have you. They typically will list all</p> <p>10 that. So I automatically get a copy of the</p> <p>11 investigator's report.</p> <p>12 And I also get a -- on my -- on the</p> <p>13 request from the pathologist, they typically</p> <p>14 will state a one-line summation of "gunshot</p> <p>15 wound." And they will also circle what kind of</p> <p>16 samples that they've drawn: blood, urine,</p> <p>17 central blood, femoral blood, that kind of</p> <p>18 stuff.</p> <p>19 Q. Okay. And -- and does that</p> <p>20 information that you receive, does that inform</p> <p>21 your decision-making as to the type of</p> <p>22 screening you'll do, or is it kind of a one</p> <p>23 size fits all?</p> <p>24 Do you understand my question?</p> <p>25 A. Both. It's a one size fits all.</p>
<p style="text-align: right;">Page 23</p> <p>1 make a decision on whether to order tox, and my</p> <p>2 guess is probably 90 percent of the cases will</p> <p>3 get tox, if not more.</p> <p>4 I get an order that they leave in</p> <p>5 my door. I retrieve the specimens. The</p> <p>6 specimens are drawn and stored in a</p> <p>7 refrigerator within the autopsy room, and I</p> <p>8 start to do the analysis on them.</p> <p>9 When I'm -- when I'm finished with</p> <p>10 my analysis, I write up a final report and</p> <p>11 submit it to our secretary, who enters it into</p> <p>12 the computer system.</p> <p>13 Q. Okay. Thank you for that.</p> <p>14 And is it the pathologists who</p> <p>15 actually take the samples initially from the</p> <p>16 decedent?</p> <p>17 A. I don't think so. Typically it's</p> <p>18 one of the assistants, the labora- -- the</p> <p>19 autopsy assistants. We have three of them.</p> <p>20 And they assist the pathologist in performing</p> <p>21 the autopsy. They'll do a lot of the cutting,</p> <p>22 and I'm pretty sure they do most of, if not</p> <p>23 all, of the blood and urine draws and tissues,</p> <p>24 et cetera.</p> <p>25 Q. And when you receive that specimen,</p>	<p style="text-align: right;">Page 25</p> <p>1 I'll still do the routine analysis regardless,</p> <p>2 but, obviously, if they find heroin at the</p> <p>3 scene, I'm going to remember that. And so my</p> <p>4 analysis should sort of fit the picture that I</p> <p>5 see at the scene.</p> <p>6 Q. So let's talk about illicit drugs</p> <p>7 for a minute. So let's assume, you know, it's</p> <p>8 a -- I'm just picking an 85-year-old man,</p> <p>9 suspected foul play in a nursing home.</p> <p>10 Would -- would you run a full drug screen on</p> <p>11 that person just the same as you would a</p> <p>12 gunshot or a suspected drug abuse?</p> <p>13 A. Yes.</p> <p>14 Q. So that's something standard?</p> <p>15 A. Pretty much.</p> <p>16 Q. Okay. And are there -- and I</p> <p>17 probably should have asked this earlier. I</p> <p>18 apologize. But just let me digress for a</p> <p>19 minute.</p> <p>20 Do you understand why you're here</p> <p>21 today?</p> <p>22 A. Vaguely, yeah.</p> <p>23 Q. What's your understanding?</p> <p>24 A. My understanding is the state</p> <p>25 and/or several states are suing the</p>

<p style="text-align: right;">Page 26</p> <p>1 pharmaceutical industry for dumping potent, 2 addictive drugs. 3 Q. And do you have any view as -- at 4 all as to whether any of the Defendants in this 5 case did anything wrong or omitted anything? 6 Is that something that's within your personal 7 knowledge? 8 A. You know, I don't really -- not 9 really. Do -- do I suspect? What I look at is 10 time frames that I see during my work. I see a 11 variety of different drugs and different eras. 12 You know, in the '60s and '70s, we were all 13 doing LSD and pot. You know, then, a variety 14 of prescription meds. 15 And again, I base this strictly on 16 what I'm seeing while I do the analysis. You 17 know, a rise and fall of certain drugs, and, 18 you know, the rise and fall of carfentanil and 19 Fentanyl analogues, the rise and fall of coke 20 and meth and all these things. So, yeah, I 21 have a general idea of what kind of drugs I'm 22 seeing in different periods of time. 23 Q. Sure. And we'll -- we'll talk 24 about that. You've actually written a paper 25 about some of that, right? At least in the</p>	<p style="text-align: right;">Page 28</p> <p>1 A. Sure. 2 Q. Okay. With respect to that 3 standard tox panel, are there certain 4 parameters that you use in order to perform the 5 test? 6 In other words, if it's, let's say, 7 cocaine, is the test basically, if it's at a 8 detect level, you report it, as opposed to if 9 it's some other thing like alcohol, like you 10 may basically not report unless it's above a 11 certain level? 12 Do you understand my question? 13 A. Yeah. Can I give you a quick 14 synopsis? 15 Q. Absolutely. 16 A. A standard tox panel -- and 17 remember, each case is unique in that if I get 18 a blood and urine and tissue, whole different 19 game than if I just get a blood sample. 20 Q. Can we stop there? 21 A. Sure. 22 Q. And tell me why. 23 A. Because drugs are eliminated by the 24 body in different ways. Every drug is 25 different. Every drug is unique. Some of my</p>
<p style="text-align: right;">Page 27</p> <p>1 last number of years. 2 A. I -- I was involved in writing the 3 most recent paper dealing with carfentanil, if 4 that's what you're referring to. 5 Q. It is. 6 A. Yeah. 7 Q. But just to make sure, my -- my 8 question is a little more specific. As to any 9 of this -- I mean, first of all, do you -- do 10 you even know who any of the Defendants are in 11 this case? 12 A. Not really, no. 13 Q. Have you read the complaint? 14 A. Not really. 15 Q. I mean, do you have a view or 16 information as to whether any of the Defendants 17 breached a duty, did something wrong, have any 18 responsibility in this litigation? 19 MS. KEARSE: Object to form. 20 A. No. 21 Q. The -- let's get back now to 22 your -- your kind of -- your work. 23 With respect to the -- what do you 24 call it, like a standard tox panel? Is that 25 how we can refer to it?</p>	<p style="text-align: right;">Page 29</p> <p>1 assays are unique. 2 Ideally, it's nice to get a urine 3 and a blood, ideally. Obviously, drugs are 4 eliminated out of the blood rapidly, and 5 they'll hang around in the urine much, much 6 longer. They're much, much concentrated. So 7 urine is an ideal sample type for screening 8 purposes. 9 So with that said, I will start 10 with an immunoassay screen that's fairly 11 comprehensive. It's geared on urine. It's run 12 on urine. I -- I do run it on blood as well, 13 but the levels are set rather high. Again, 14 geared toward urine. 15 These are the same immunoassay that 16 everybody uses. There's a lot of history to 17 this, and I don't want to go into the 18 explanation why it's like that, but basically 19 because the federal government set these 20 limits. They're the biggest purchaser of these 21 kits, so every manufacturer is going to go with 22 the federal guidelines in terms of the 23 thresholds and the detection levels on these -- 24 on these drugs. So we also do. The Department 25 of Transportation of Ohio does. All the other</p>

<p style="text-align: right;">Page 30</p> <p>1 entities will go with what the federal 2 government standards are. 3 So I purchase the kit through 4 various manufacturers. I happen to use 5 Siemens. It used to be known as EMIT. I still 6 call it EMIT. But, again, it's an immunoassay, 7 and it screens for cocaine, methadone, opiates, 8 amphetamines, which is pretty much 9 methamphetamine and amphetamine, barbiturates, 10 benzodiazepines, alcohol, a variety of drugs. 11 And there's more. So that's the initial 12 screen. 13 The next phase, of course, is -- 14 well, for me, is alcohol. I will do an alcohol 15 by gas chromatography on blood if it's 16 available. 17 The next phase is if there's any 18 positives from that screen. You mentioned 19 cocaine. My next step would be, since I got a 20 positive screen for cocaine, I will do a 21 quantitative level on the blood to see how much 22 cocaine. And typically it's going to be 23 benzoylecgonine, the primary metabolite of 24 cocaine, is in the blood. And I will do that 25 by GC-MS.</p>	<p style="text-align: right;">Page 32</p> <p>1 forensic analysis on a law enforcement agen- -- 2 for a law enforcement agency, because, again, 3 they have per se levels on certain drugs in 4 urine. 5 Q. So it is -- it is possible. It's 6 just not the protocol and the procedure in 7 urine to quantitate it for specific illicit 8 drugs; is that right? 9 A. Correct. And in reality the urine 10 level is pretty much worthless. I'm not sure 11 why the state came up with per se levels on 12 these things, but I didn't make those rulings. 13 Again, the problem with the 14 urine -- and marijuana is a perfect example -- 15 you can get a urine positive for weeks and 16 there's probably -- could have been nothing in 17 the blood. So if -- you know, if the guy 18 smoked some pot two weeks ago and he's still 19 positive in the urine, according to the state, 20 if it's over 15 nanograms of delta-9-carboxy-THC, 21 he's impaired, where in reality he probably has 22 nothing in his blood and he hasn't smoked in 23 over a week. So, you know -- 24 Q. Uh-huh. 25 A. But again, the state levels are the</p>
<p style="text-align: right;">Page 31</p> <p>1 Q. Can I just stop you for a second? 2 A. Sure. 3 Q. With respect -- and that's really 4 helpful. Thank you for that. 5 With respect to the urine analysis, 6 you used the word "screen" a few times. Is it 7 really just that? 8 So in other words -- 9 A. Positive/negative. 10 Q. So -- oh, so you can't -- that 11 doesn't really tell you very much about -- 12 other than it's there above a certain 13 threshold. 14 But if you want to -- sometimes in 15 the reports we've seen, we've seen .639 16 nanograms per, you know, some other 17 differentiating. That level of certainty or 18 precision comes from a blood analysis? 19 A. For our cases it's blood. Will I 20 quantitate urine on our cases? No. But I do 21 quantitate urine for law enforcement, because 22 law enforcement, the state has per se levels, 23 for example, cocaine. 24 So, yes, I will quantitate a 25 cocaine level in urine for the -- for a</p>	<p style="text-align: right;">Page 33</p> <p>1 state levels. That's their problem. 2 Q. Okay. And before we get to the 3 blood confirmatory, how -- I take it, like with 4 most things in science and medicine and 5 technology, there is a chance of, you know, 6 false positives and false negatives. 7 A. There is. 8 Q. Is the same true for a urine assay? 9 A. Absolutely. 10 Q. Is -- is that something that is 11 different for a particular substance? So, in 12 other words, I -- well, strike that. 13 I take it that they probably 14 publish, like, what their rate is. 15 A. Yeah, they do. 16 Q. All right. So is it, you know, a 17 percentage overall, do you know, or is it 18 something that's different by -- by kind of 19 substance? 20 A. The reliability of these assays is 21 fairly high. Certainly over 90 percent. I 22 think most of them are going to say 95 percent 23 or higher. With -- there are a few exceptions. 24 For example -- now they've come up 25 with better assays. At one time the</p>

<p style="text-align: right;">Page 34</p> <p>1 amphetamines, for example, cross-react with 2 ephedrine and pseudoephedrine, so you'll get a 3 positive. But you're really not sure if, is it 4 amphetamine, methamphetamine, MDMA, ephedrine? 5 So, again, it's important to confirm and 6 identify what's causing a positive. 7 Opiates, same thing. Just because 8 you've got a positive opiate, that's great for 9 the emergency room doctor because he's going to 10 treat an opiate overdose the same way. For our 11 intents and purposes, I have to identify what 12 it is and how much is in the blood. 13 Q. And is -- are there certain illicit 14 substances that you can detect in one but not 15 the other with -- you know, with a level -- a 16 level of accuracy? In other words, is there 17 something XYZ chemical that there's really 18 not -- 19 Well, let -- let me just ask you a 20 better question. Take carfentanil, for 21 example. 22 A. Okay. 23 Q. Is carfentanil something that is 24 equally detectable to, you know, a reasonable 25 degree of certainty in both urine and blood?</p>	<p style="text-align: right;">Page 36</p> <p>1 around except for the last couple years. And 2 all of the sudden we got inundated with a 3 variety of not just carfentanil, but a -- it 4 seemed like every month a new Fentanyl analogue 5 was popping up. 6 So the screen was -- was tough 7 because we really didn't know what percent 8 cross-reactivity there was with all of the 9 Fentanyl analogues. So you get a positive 10 screen. 11 I guess I'm hoping to answer your 12 answer -- or your question. 13 Q. No, you're answering it. You are. 14 A. Then you need to confirm it. 15 By the way, I do not turn out 16 screen answers. The screening is strictly 17 internal. I don't turn out any answer without 18 a confirmation. 19 The screening is for my purposes. 20 It tells me what I can suspect is on board. If 21 I get a Fentanyl or a carfentanil or any other 22 positive by the screen, that's strictly for my 23 use. 24 Q. Is that only true for Fentanyl or 25 carfentanil, or is that just generally --</p>
<p style="text-align: right;">Page 35</p> <p>1 A. That's not -- there's no easy 2 answer to that. 3 Q. Okay. 4 A. You start with the screen. The 5 screen is close to 100 percent cross-reactive 6 between carfentanil and Fentanyl. So pretty 7 much the same amount of carfentanil will give 8 you a positive as regular Fentanyl, so you get 9 a positive screen for Fentanyl. 10 Now, that's with my assay. There's 11 different assays out there. I'm familiar with 12 my assay made by a company out of California 13 called Immunalysis. That's what I use for 14 Fentanyl. There's several other companies that 15 manufacture it. 16 And it's an antibody-antigen 17 competitive binding technique, so it's -- a lot 18 of it is based on the antibody that that 19 particular manufacturer has, how specific is 20 it, how good is it, what their detection level 21 is. And they do, in theory, cross-reactivity 22 studies for all the Fentanyl and Fentanyl 23 analogues as well. 24 Carfentanil is unique in that -- as 25 well as the analogues, is that they were never</p>	<p style="text-align: right;">Page 37</p> <p>1 A. That's true for every drug I do. 2 Q. So if it's -- so is -- does that -- 3 even being broader, a screen would be any urine 4 testing is just a screen tool -- 5 A. Just a screen. 6 Q. And when you say you don't turn it 7 out, you don't think it has a level of 8 reliability such that it should be public; it's 9 just -- it's a tool that you use to help inform 10 further analysis? 11 A. It's a tool I use -- it's not that, 12 a matter of reliability. It's a matter of 13 having an alternate method. It's a good 14 laboratory practice. You have to confirm a 15 positive by an alternate method to ensure that 16 there's no false negative, false positive. 17 Q. And that's -- that's the way it 18 works in every single case? 19 A. That's the way it should work in 20 any forensic lab. 21 Q. Okay. 22 A. That's the way it works in my lab. 23 Q. So it would -- it would not be your 24 practice to release a urine screen, a positive, 25 as kind of a reliable decision -- reliable</p>

<p style="text-align: right;">Page 38</p> <p>1 factor in making decision points until you had 2 some other confirmatory testing, like blood 3 or -- or other tissue -- 4 A. Correct. 5 Q. -- specimens; is that right? 6 A. Correct. 7 Q. Is -- is the way you've just 8 described this process, is that the same way 9 it's used for law enforcement? When you work 10 for the Akron PD? 11 A. Yes. 12 Q. The same assays, things like that? 13 A. At the Akron PD, when I first set 14 up the lab, they wanted me to do full tox for 15 them. They only do a couple dozen drug screens 16 a year, but they'll do dozens and dozens of 17 alcohols, and they were willing to buy me 18 whatever I needed. 19 And I basically told them that it 20 was -- it would cost them \$1,000 per tox screen 21 when they're only doing a couple dozen a year. 22 So my suggestion was let me just do the 23 alcohols there at the police department and the 24 pure drug contraband. 25 And the toxicology we'll send to</p>	<p style="text-align: right;">Page 40</p> <p>1 forensic cases, I only have a urine sample, and 2 I will give them a quantitative answer if it's 3 a per se drug. 4 Q. And with respect to the urine 5 screen, what are the next steps -- and let's -- 6 let's talk about, you know, some of the -- the 7 illicit drugs like, you know, carfentanil, 8 Fentanyl -- well, let me take a step back. 9 You appreciate, I'm sure, that 10 there are certain drugs or certain substances, 11 like cocaine and heroin and probably 12 carfentanil, that don't have a legitimate 13 medical use, right? 14 A. Well, cocaine does. They used 15 to -- when they did nose surgery, they used to 16 pack your nose with cocaine. I don't know if 17 they still do or not, but -- 18 Q. Well, let's assume that they don't 19 for -- for just argument's sake, or else maybe 20 people may be getting nose jobs. 21 But with respect to something like 22 Fentanyl -- 23 A. Right. 24 Q. -- right, you know that it's a -- 25 it's a legitimate --</p>
<p style="text-align: right;">Page 39</p> <p>1 the medical examiner's office like all the 2 other law enforcement agencies do, where I'm 3 prepared, and it's much more cost effective, 4 rather than doing one sample, you know, every 5 couple weeks for full tox, I'll throw it in my 6 batch at the medical examiner's office, and it 7 brings the cost down substantially. 8 Q. It's more -- 9 A. So that's what we're doing. 10 Q. -- more efficient to pool those 11 resources? 12 A. Much more efficient, yes. 13 Q. And is this -- is it -- am I 14 correct that the same methodology and same 15 standards that you apply in doing the testing 16 for the ME's office is the same that you do for 17 the police departments? 18 A. Correct. 19 Q. In other words, you don't -- you 20 don't look at them differently. Basically, 21 you're somewhat blind to, you know, the way 22 you're approaching this. Is that -- is that 23 fair? 24 A. It's the same approach. The only 25 difference is, as I said, with some of the</p>	<p style="text-align: right;">Page 41</p> <p>1 A. Absolutely, sure. 2 Q. So it can either be powdered 3 illicit Fentanyl, right, or it could be 4 Fentanyl that's used in a -- in a medicine, 5 right, that's -- that's actually legitimate? 6 A. Correct. 7 Q. Okay. So just Fentanyl, as an 8 example, where just finding a Fentanyl kind of 9 positive doesn't necessarily tell you anything 10 about whether it's lawful or illegal; is that 11 right? 12 A. Not just from the analysis, no. 13 Q. Right. I mean, in anything, can -- 14 that you do in terms of from a tox perspective, 15 can you ever determine whether it comes from a 16 particular brand or a particular manufacturer? 17 A. Strictly from the analysis, no. 18 Q. And in terms of Fentanyl, can you 19 make a determination as to whether it's from a 20 prescription -- a Fentanyl prescription or 21 whether it's from illicit? 22 A. No. 23 Q. And we had a -- a chance to speak 24 to -- to Dr. Kohler, and I had a few questions, 25 and she actually said that you would be the</p>

<p style="text-align: right;">Page 42</p> <p>1 person to talk to.</p> <p>2 Maybe you could help us understand</p> <p>3 how heroin sometimes shows up in the blood, I</p> <p>4 think it was as morphine, when it breaks down?</p> <p>5 Am I getting that right?</p> <p>6 A. Yes.</p> <p>7 Q. Could you explain that a little bit</p> <p>8 for us?</p> <p>9 A. Heroin is actually</p> <p>10 diacetylmorphine, and it lasts as that -- as</p> <p>11 the parent compound, diacetylmorphine, as --</p> <p>12 which is the parent compound, for about 10</p> <p>13 minutes, generally.</p> <p>14 I'll give you a range since people</p> <p>15 are writing down the 10 minutes. It's 5 to 15</p> <p>16 minutes. But generally it routes -- let's just</p> <p>17 say, 10 minutes. Then the body breaks it down</p> <p>18 into 6-acetylmorphine or 6-monoacetylmorphine,</p> <p>19 the primary metabolite of heroin. Again, for</p> <p>20 another 15 to 30 minutes. This is blood, now,</p> <p>21 I'm talking about. And after that, it's all</p> <p>22 broken down into morphine.</p> <p>23 So you've got a narrow window to</p> <p>24 detect heroin in a form that I could say it's</p> <p>25 heroin, in the blood. Again, 20 to 40 minutes.</p>	<p style="text-align: right;">Page 44</p> <p>1 within 15 minutes of it, would that essentially</p> <p>2 stop, kind of time-out the process, and then if</p> <p>3 you took a blood sample, you'd likely be able</p> <p>4 to see that?</p> <p>5 A. Possibly I may be. And I've tried</p> <p>6 to see it. Again, there's a lot of other</p> <p>7 issues involved.</p> <p>8 Q. Right.</p> <p>9 A. I'm just kind of gen- -- give you,</p> <p>10 in a general idea.</p> <p>11 Q. I understand.</p> <p>12 A. There's a lot of other issues.</p> <p>13 Q. No, I understand.</p> <p>14 A. Postmortem redistribution, the</p> <p>15 decomposition, et cetera.</p> <p>16 But anyway, generally, I rarely am</p> <p>17 going to see heroin as heroin itself or as a</p> <p>18 primary metabolite. I'm only going to see</p> <p>19 morphine in the blood.</p> <p>20 Now, in the urine I will detect all</p> <p>21 the -- I certainly will detect the primary</p> <p>22 metabolite, the 6-monoacetylmorphine, in the</p> <p>23 urine, as well as morphine. So I will detect</p> <p>24 it in the urine probably a good 24 hours.</p> <p>25 And a lot of our death cases, they</p>
<p style="text-align: right;">Page 43</p> <p>1 Q. And can I ask, does that -- does</p> <p>2 that process continue -- in other words, is</p> <p>3 that time frame post-death? So --</p> <p>4 A. No. This is -- when you're living</p> <p>5 and the body's working on those drugs, the</p> <p>6 liver, the kidneys, et cetera, they're breaking</p> <p>7 all these drugs down to get rid of them.</p> <p>8 Now, during that half hour to 45</p> <p>9 minutes that you're doing the heroin, mind you,</p> <p>10 it's also dumping it all into your urine</p> <p>11 because it's -- it's eliminating it all.</p> <p>12 So in the blood, after 45</p> <p>13 minutes -- and this is a general time frame --</p> <p>14 after that initial 45 minutes, all you're going</p> <p>15 to see is morphine because all the rest of the</p> <p>16 stuff has been broken down and/or eliminated.</p> <p>17 So when I say morphine in the</p> <p>18 blood, in most postmortem cases we -- we</p> <p>19 haven't drawn that sample while the guy was</p> <p>20 alive, obviously, so we're going to see -- I'm</p> <p>21 not going to ever -- or rarely ever am I going</p> <p>22 to see the diacetylmorphine or the</p> <p>23 6-monoacetylmorphine in the blood.</p> <p>24 Q. Let me just ask you, if in an</p> <p>25 unusual situation someone took heroin, died</p>	<p style="text-align: right;">Page 45</p> <p>1 linger. They don't -- you know, unless we find</p> <p>2 a syringe in his vein and the guy's dead at the</p> <p>3 scene with a syringe sticking in his vein,</p> <p>4 typically that's not how most -- most of these</p> <p>5 ODs die. They'll linger for a while, and</p> <p>6 linger and linger, and then an hour later</p> <p>7 they're dead because their organs start</p> <p>8 shutting down. And that's typically how an</p> <p>9 overdose death works.</p> <p>10 Q. So -- so when you see the morphine</p> <p>11 in the blood, the way that you would have a</p> <p>12 better ability to determine whether it was</p> <p>13 heroin was by looking at the urine --</p> <p>14 A. Correct.</p> <p>15 Q. -- to the extent that you could do</p> <p>16 it.</p> <p>17 A. Or vitreous.</p> <p>18 Q. What's that?</p> <p>19 A. Eyeball fluid.</p> <p>20 Q. Okay. And there was some reference</p> <p>21 to free-morphine. Is that a -- what does that</p> <p>22 mean?</p> <p>23 A. Morphine is highly protein-bound.</p> <p>24 It's bound to a glucuronide. The bound</p> <p>25 portion -- and I'm guessing. I don't have the</p>

<p style="text-align: right;">Page 46</p> <p>1 literature in front of me, the reference book. 2 It's probably 85 percent bound. It's bound to 3 protein. 4 The bound portion is not the active 5 portion of the drug. It's the free portion 6 that goes to the binding sites within the 7 brain, and that's where the -- where the action 8 takes place, the effect of the drug. 9 So the free portion is what we 10 monitor, because that's the deciding factor. 11 Most of the reference ranges in literature are 12 referring to free portion of drug. 13 Q. Okay. Do -- do you make any -- 14 well, strike that. 15 I take it the final determination 16 as to cause of death is a medical doctor or a 17 pathologist who makes that determination; is 18 that right? 19 A. Correct. 20 Q. That's not something you do? 21 A. No. 22 Q. Your information and work is -- is 23 used to assist him or her, but -- but that's 24 their responsibility; is that right? 25 A. Absolutely.</p>	<p style="text-align: right;">Page 48</p> <p>1 MS. KEARSE: Object to the form. 2 Just the form, excuse me. 3 A. I would think. Again, I don't make 4 those decisions. That's up to the pathologist. 5 Q. So do -- do you ever communicate 6 that type of information? 7 A. They have all the information. My 8 primary goal is to do the analysis and give 9 them a number, a level of whatever drug I find. 10 Whether it's suicide or whether it's mixed drug 11 toxicity or whether it's, you know, a heroin 12 overdose, that's their call. 13 Q. And have you seen the actual 14 autopsy -- autopsy reports? 15 A. I don't know if I have. 16 Q. Let me -- let me just show you 17 this, what we're going to mark here as -- as 18 Exhibit 1. 19 MR. CHEFFO: Just for everyone's -- 20 this is for the lawyers, Mr. Perch. But just 21 for everyone's edification, this is going to be 22 what we marked yesterday as Exhibit 2. It's 23 the same document. 24 He's going to put a sticky on it 25 for you.</p>
<p style="text-align: right;">Page 47</p> <p>1 Q. Do you ever consult and have 2 discussions about cases from time to time? 3 A. Yes. 4 Q. Is that with some fre- -- that 5 wouldn't be unusual to do that? 6 A. It wouldn't be unusual. 7 Q. And are there certain times -- 8 let's talk suicide, for -- for example, right? 9 There are -- you know, I've been looking 10 through some of the materials -- and I'll show 11 you in a minute to see if they refresh your 12 recollection -- but -- but there's some even 13 lawful, very legitimate things, 14 benzodiazepines, maybe even some SSRIs, right, 15 that people take, you know, regularly, but at 16 very high doses can be fatal. Is that -- is 17 that fair? 18 A. Yes, yes. 19 Q. And often when you see, right, a 20 kind of a cocktail of these otherwise 21 legitimate medicines in a -- in a very -- kind 22 of all at the same time in a decedent, it 23 raises at least a question of whether it was a 24 suicide; isn't that right? 25 A. I would --</p>	<p style="text-align: right;">Page 49</p> <p>1 - - - - - 2 (Thereupon, Deposition Exhibit 1, 3 Document Titled "Drug Overdose 4 Deaths, 01/01/2016 to 12/31/2016," 5 SUMMIT_68523 to 000068568, was 6 marked for purposes of 7 identification.) 8 - - - - - 9 Q. Mr. Perch, I'm not going to ask you 10 excruciating details about any of these, but 11 I'm just going to ask some general questions. 12 Have you seen a document like this? 13 A. This looks like something that Pat 14 would have pulled up. I -- I've actually asked 15 him to pull up various things from the computer 16 system for me, and it looks very similar. 17 Q. Pat is who? 18 A. Pat was our IT guy. 19 Q. He's retired now? 20 A. He is. 21 Q. Does he still work on a consulting 22 basis? 23 A. He did for a little while, because 24 the computer system we used, I think, was his 25 design, so we're in the process of switching</p>

<p style="text-align: right;">Page 50</p> <p>1 over.</p> <p>2 Q. Is there someone who fills Pat's</p> <p>3 role?</p> <p>4 A. Well, our county computer services</p> <p>5 is -- has taken over.</p> <p>6 Q. And on what -- what -- on what</p> <p>7 occasion would you ask -- what was his last</p> <p>8 name? I'm sorry.</p> <p>9 A. Gillespie.</p> <p>10 Q. Mr. Gillespie. Has -- have you --</p> <p>11 what occasions would you have asked</p> <p>12 Mr. Gillespie to run reports like this for?</p> <p>13 A. A lot of times I ask him to pull up</p> <p>14 the homicides so I can get rid of samples.</p> <p>15 Homicides I keep for five years. The rest of</p> <p>16 the samples, I was just overwhelmed with</p> <p>17 samples, and I don't have the space to store</p> <p>18 them, so I'll have him pull up a list of all</p> <p>19 the homicides. And when I have the guys get</p> <p>20 rid of my samples from a previous year, I give</p> <p>21 them a copy of that list and say, "Save these."</p> <p>22 Things like that.</p> <p>23 Q. Okay. Yeah, and what is the --</p> <p>24 what is the policy for samples and things? Is</p> <p>25 it one year, typically, other than homicides?</p>	<p style="text-align: right;">Page 52</p> <p>1 A. I do.</p> <p>2 Q. So if -- if nothing was detected,</p> <p>3 would you essentially, you know, pass go?</p> <p>4 Would you go further and do a blood test, or is</p> <p>5 there other results that we would look for,</p> <p>6 for -- in this case, you can see the cause of</p> <p>7 death is listed as carfentanil.</p> <p>8 A. Well, it wouldn't be a carfentanil</p> <p>9 toxicity if there wasn't carfentanil in it.</p> <p>10 Keep in mind, carfentanil is unique in that my</p> <p>11 equipment is gas chromatography-mass</p> <p>12 spectrometry. The detection level is probably</p> <p>13 about 1 nanogram per ml.</p> <p>14 In the majority of the cases, I can</p> <p>15 detect carfentanil in the urine, because, as I</p> <p>16 mentioned before, urine -- drugs are</p> <p>17 concentrated quite a bit in urine, sometimes</p> <p>18 100-fold. So I can detect carfentanil in the</p> <p>19 urine in most cases.</p> <p>20 I can't in blood, just because</p> <p>21 it -- you're talking levels down in the</p> <p>22 picogram range now. You know, the levels</p> <p>23 versus Fentanyl are 100 times lower in most</p> <p>24 cases just because of the potency of</p> <p>25 carfentanil. And I don't have the equipment</p>
<p style="text-align: right;">Page 51</p> <p>1 A. The homicides are five years.</p> <p>2 Undetermined deaths are five years. The rest</p> <p>3 of them pretty much one year.</p> <p>4 Q. And that's still in place?</p> <p>5 A. As far as I know.</p> <p>6 Q. Now, if you just take a look at</p> <p>7 this document, you'll see there's a number of</p> <p>8 entries, right, and it tells you where the</p> <p>9 specimen came from. It says "blood" on the</p> <p>10 right. I'm in the "Toxicology Results"</p> <p>11 section.</p> <p>12 A. Oh, yes.</p> <p>13 Q. Do you see that?</p> <p>14 A. Uh-huh.</p> <p>15 Q. And I'm trying to find -- most of</p> <p>16 these are blood, but let me -- okay.</p> <p>17 So just take a look, if you would,</p> <p>18 please, at page 22. It's on the bottom</p> <p>19 right-hand corner. There's little numbers</p> <p>20 there. And look at 55688. Do you see that?</p> <p>21 A. Correct.</p> <p>22 Q. So that is a urine sample, right?</p> <p>23 A. Yes.</p> <p>24 Q. And it says "None detected." Do</p> <p>25 you see that? Right above it.</p>	<p style="text-align: right;">Page 53</p> <p>1 necessary to go below 1 nanogram per ml.</p> <p>2 So I don't even -- I initially</p> <p>3 tried to set up an assay, but I just could not</p> <p>4 get below 1 nanogram per ml. It's the limit of</p> <p>5 the equipment I have.</p> <p>6 What you need is something known as</p> <p>7 LC-MS-MS. And I tried to buy one, and it was</p> <p>8 about \$300,000, and the county wouldn't let me</p> <p>9 have one. It was really more cost effective</p> <p>10 for me to send out the samples to reference</p> <p>11 labs.</p> <p>12 And that's probably what I did in</p> <p>13 this case. I don't know what this summary</p> <p>14 report is, but I can tell you right now, my --</p> <p>15 my guess is, in this particular case, I didn't</p> <p>16 detect it. If this is my report, I probably --</p> <p>17 I found no carfentanil in the urine, and I</p> <p>18 probably sent it out to a reference lab -- and</p> <p>19 I always send out the blood -- and they</p> <p>20 probably -- I'm guessing, since I don't have</p> <p>21 the actual report --</p> <p>22 Q. Understood. Understood.</p> <p>23 A. -- that they probably found</p> <p>24 carfentanil in the blood.</p> <p>25 Q. I see. And I -- what you're saying</p>

<p style="text-align: right;">Page 54</p> <p>1 is fair. I know you don't make the cause of 2 death. I'm really not asking you detailed 3 questions. I just picked that one as an 4 example. You'd have to look at the file, 5 right? 6 A. I would have to look at the file. 7 Q. Right. 8 A. Yes. 9 Q. So we're talking in generalities. 10 A. Yeah. 11 Q. So as a general matter, if -- if 12 there was, let's say, you know, an 13 investigator's report that found someone who 14 was deceased, right, and they wrote that there 15 was drug paraphernalia around, you would run 16 your tox screen, and the fact that it was not 17 found -- carfentanil was not in the urine, you 18 would then make a decision to send it on to -- 19 for a blood testing? 20 A. Correct. And in some instan- -- 21 some instances, even if I detected it, I would 22 send it out. 23 I'll give you an example. Three 24 young ladies, 20-year-olds, all found dead. I 25 did the analysis, and again I found ecstasy or</p>	<p style="text-align: right;">Page 56</p> <p>1 that -- does that come into your analysis? 2 A. I don't know if it comes into my 3 analysis, but I -- you know, that's in the 4 paper, in the newspapers. I read it a lot. 5 When the police department confiscates a bundle 6 or a baggie of powder, everything is heroin. 7 They always say, you know, "We suspect some 8 sort of heroin." Even the users, I was told by 9 some of the narcotics detectives, that they 10 were asking for the, quote, "zoo heroin," 11 meaning the carfentanil. 12 So, I mean, you know, I -- I take 13 it all with a grain of salt. I wait for the 14 mass spec to see actually what it is. 15 Q. Now, just somewhat by accident, I 16 guess, but it's easy for us. Look at the, if 17 you would, on this, the one I just asked you to 18 look at, the urine. So that was 55688. Just 19 take a look, if you would, at the one right 20 above it and the one right below it, right? 21 Because in the carfentanil, it does actually 22 have a blood testing, so I'm going to ask you 23 just about that. And then the one below it, it 24 actually looks like there was a positive urine 25 test for carfentanil.</p>
<p style="text-align: right;">Page 55</p> <p>1 MDMA and carfentanil in all three in their 2 urines. 3 Since this was going to be a 4 high-profile case and probably a court case, 5 Dr. Sterbenz asked if I could get levels on the 6 blood, which I did. I sent it out to a 7 reference lab, and sure enough, I did -- they 8 identified the same thing I did, that I found 9 in the urine, but they found -- obviously, I 10 sent out the blood, and they gave me levels for 11 the MDMA and the carfentanil in the blood. 12 Q. And -- and you -- in your work both 13 with the ME and in the police department, you 14 know, this cross kind of referencing, are there 15 situations where the -- like the one you just 16 described, that it could be at least a 17 suspected homicide? 18 So in other words, you know, we've 19 all read stories, right, in the popular press, 20 a young person typically, right, goes and they 21 buy what they think is, you know, marijuana or 22 something else, or even maybe Fentanyl, and 23 it's laced with carfentanil, right? And then 24 they -- they don't mean to overdose. They 25 don't know what they're getting. Is that -- is</p>	<p style="text-align: right;">Page 57</p> <p>1 So I guess my question is -- 2 Mr. Perch, is, would it be your belief that if 3 it says blood carfentanil present, that that 4 would have been something you sent out to a lab 5 because you didn't have the ability to make 6 that determination? 7 A. Correct. 8 Q. And would it also be your -- your 9 belief that the urine sample that showed 10 positive carfentanil amongst these other drugs 11 would have been something that was done 12 in-house? 13 A. Probably, but it took me a while to 14 set up a method to test for carfentanil. 15 Initially, when -- when we first started 16 seeing -- and I distinctly remember the day 17 that we saw carfentanil in Summit County. It 18 was the 4th of July weekend. 19 Q. Right. And this is just -- so to 20 orient you, this is just a few weeks later? 21 A. It's a few weeks later. So at that 22 time, I was scrambling. Nobody had ever heard 23 of carfentanil. I called every refer- -- 24 National Medical Services. I don't know if 25 you're familiar with NMS.</p>

<p style="text-align: right;">Page 58</p> <p>1 Q. I've heard of it.</p> <p>2 A. It's a huge reference lab that</p> <p>3 pretty much the whole country goes to. Axis</p> <p>4 out at Indianapolis, AIT. I called around, and</p> <p>5 nobody had even heard of it, let alone test for</p> <p>6 it.</p> <p>7 Q. And how did you do -- so was it</p> <p>8 showing up as, like, a positive Fentanyl? How</p> <p>9 did you even know that there was such a thing</p> <p>10 that was being ingested called carfentanil?</p> <p>11 A. We received a ton of paraphernalia</p> <p>12 from the narcotics officers on that weekend.</p> <p>13 And they told us basically they just -- there</p> <p>14 was, like, 25 overdoses, all admitted to the --</p> <p>15 on that day, admitted to various emergency</p> <p>16 rooms throughout the city. And they had all</p> <p>17 the contraband: spoons, straws, baggies,</p> <p>18 bindles, all kinds of stuff. So we tested</p> <p>19 that, and it came up with a hit for</p> <p>20 carfentanil.</p> <p>21 Initially, I -- my partner and I</p> <p>22 looked at each other, and -- I never heard of</p> <p>23 carfentanil, and neither did he. So we looked</p> <p>24 it up, and sure enough, it's some sort of an</p> <p>25 animal tranquilizer.</p>	<p style="text-align: right;">Page 60</p> <p>1 I actually sent him a sample of my</p> <p>2 carfentanil standard that we got from the zoo,</p> <p>3 and he set up an assay for us. He has two of</p> <p>4 the LC-MS-MS systems down there.</p> <p>5 Q. Are you -- in 2018, are you, in the</p> <p>6 labs, continuing to see deaths related to</p> <p>7 carfentanil?</p> <p>8 A. No.</p> <p>9 Q. It's pretty much done?</p> <p>10 A. Pretty much done.</p> <p>11 Q. Has another Fentanyl analogue taken</p> <p>12 its place?</p> <p>13 A. Fentanyl. Fentanyl has roared</p> <p>14 back, regular Fentanyl. Probably illicit</p> <p>15 Fentanyl, I'm suspecting, but...</p> <p>16 Q. I mean, Dr. Kohler believed that</p> <p>17 most of it was illicit Fentanyl. Would that be</p> <p>18 your understanding?</p> <p>19 A. That's my guess.</p> <p>20 Q. Uh-huh.</p> <p>21 A. And it's an educated guess based on</p> <p>22 a lot of times at the scene -- and the scene is</p> <p>23 very important -- they will find paper, a</p> <p>24 bindle, powder, a straw, a spoon, a syringe,</p> <p>25 and I will typically test those as well,</p>
<p style="text-align: right;">Page 59</p> <p>1 We called the Akron Zoo, talked to</p> <p>2 the vet. He told us they didn't have any</p> <p>3 animals large enough to warrant them keeping</p> <p>4 carfentanil on hand, and recommended the</p> <p>5 Cleveland Zoo. So that's where we first --</p> <p>6 We actually contacted -- contacted</p> <p>7 the Cleveland Zoo and sent an officer, along</p> <p>8 with a copy of our DEA license, Ohio Board of</p> <p>9 Pharmacy license, before they'd give us some of</p> <p>10 that carfentanil.</p> <p>11 Q. I see. And -- well, thank you for</p> <p>12 that. That's --</p> <p>13 So this -- this may have been a</p> <p>14 time before you had -- you know, you were able</p> <p>15 to kind of get your arms around it. But at --</p> <p>16 but at some point, if we were to look a year or</p> <p>17 two later, now you actually have the ability to</p> <p>18 do a urine test.</p> <p>19 A. I do. And probably a couple months</p> <p>20 after that, I had the ability. Initially, the</p> <p>21 only lab I could do, that would do carfentanils</p> <p>22 for me, was in Columbus. The coroner's office</p> <p>23 in Columbus, Dan Baker, is a friend of mine.</p> <p>24 He runs -- he's their toxicologist, and I was</p> <p>25 telling him what we were seeing.</p>	<p style="text-align: right;">Page 61</p> <p>1 because it's a -- it's important to know what's</p> <p>2 at the scene. Obviously, if I find a syringe</p> <p>3 sitting next to the body and it's got Fentanyl</p> <p>4 in it, I highly suspect that there would be</p> <p>5 Fentanyl in the system.</p> <p>6 Q. Do you know what OARRS is? Have</p> <p>7 you heard of that?</p> <p>8 A. OARRS?</p> <p>9 Q. Yes, sir.</p> <p>10 A. Yes.</p> <p>11 Q. It's a -- it's a system that</p> <p>12 enables professionals, doctors, right, to look</p> <p>13 and see if someone is prescribed a controlled</p> <p>14 substance?</p> <p>15 A. Yes.</p> <p>16 Q. Do you make use of OARRS?</p> <p>17 A. Occasionally.</p> <p>18 Q. Would a -- would a circumstance</p> <p>19 like this, like Fentanyl, is that something you</p> <p>20 would look for?</p> <p>21 A. No. I look at OARRS when I have</p> <p>22 nothing. When I find nothing and they suspect</p> <p>23 some sort of an overdose.</p> <p>24 Most laboratories have a limited</p> <p>25 amount of drugs that we can test for. Am I</p>

<p style="text-align: right;">Page 62</p> <p>1 going to test for every drug out there?</p> <p>2 Absolutely not. I test for the majority of</p> <p>3 drugs that are going to be lethal and toxic.</p> <p>4 So not all prescription drugs.</p> <p>5 So typically when I look at OARRS</p> <p>6 is I've done everything I can, and now I'm</p> <p>7 starting to research the case because the docs</p> <p>8 tell me that they highly suspect something that</p> <p>9 they overdosed on and I'm not finding anything.</p> <p>10 So I will look at OARRS to see if there's any</p> <p>11 prescriptions that are unique to that</p> <p>12 individual that I don't test for.</p> <p>13 Q. And let me just ask you maybe for a</p> <p>14 different purpose, and it sounds like you</p> <p>15 don't -- you don't need to do this, but let's</p> <p>16 assume it's a Fentanyl, right? You're certain</p> <p>17 you don't need confirmation that it's Fentanyl,</p> <p>18 but a question might be for someone else, it</p> <p>19 sounds like, is this from a prescription or is</p> <p>20 this from street drug? One way of perhaps</p> <p>21 answering that question would be to look at the</p> <p>22 OARRS database, right?</p> <p>23 A. Correct. Yeah.</p> <p>24 Q. To find out if they're actually --</p> <p>25 Dr. Smith --</p>	<p style="text-align: right;">Page 64</p> <p>1 if I -- I'm not trying to mischaracterize it,</p> <p>2 so if I get it wrong, please do exactly what</p> <p>3 you did and tell me.</p> <p>4 So -- so there's been a drop-off.</p> <p>5 Hasn't disappeared completely?</p> <p>6 A. At the beginning of the year, there</p> <p>7 was a few cases. I can't recall seeing</p> <p>8 anything in the last few months. It's -- it's</p> <p>9 pretty much all Fentanyl. If I get a positive</p> <p>10 Fentanyl screen, it's kind of back to when --</p> <p>11 prior to the carfentanil epidemic, that I call</p> <p>12 an epidemic. Now I can pretty much -- 100</p> <p>13 percent of the time I'm going to just find</p> <p>14 Fentanyl.</p> <p>15 Q. What about oxycodone? Do you -- do</p> <p>16 you recall this year finding any, many deaths</p> <p>17 that were attributable to oxycodone?</p> <p>18 A. I found oxycodone. Again, it's not</p> <p>19 very common this year, but I do see oxycodone.</p> <p>20 If -- if I attributed it -- excuse me -- I --</p> <p>21 I -- I don't know how how -- if any of them</p> <p>22 were involved as far as a lethal nature or not.</p> <p>23 Q. What about hydrocodone?</p> <p>24 A. Again, occasionally. I don't see</p> <p>25 hydrocodone -- hydrocodone, oxycodone,</p>
<p style="text-align: right;">Page 63</p> <p>1 A. Of course, again, that's -- you</p> <p>2 make that assumption. Just because a person</p> <p>3 has a Fentanyl prescription doesn't necessarily</p> <p>4 mean that's what I found, you know. They could</p> <p>5 have also gotten illicit Fentanyl.</p> <p>6 So, I mean, you know, there's a lot</p> <p>7 of ways to look at that. But do I look at</p> <p>8 that? No. That's not my role. I -- unless</p> <p>9 I'm specifically asked by the pathologist,</p> <p>10 which I can't remember ever them actually ever</p> <p>11 asking if it was a prescription or illicit.</p> <p>12 Fentanyl is Fentanyl.</p> <p>13 Q. All right. In your experience,</p> <p>14 even people who have prescriptions can</p> <p>15 otherwise abuse medicines and go outside the</p> <p>16 system?</p> <p>17 A. It's possible, sure.</p> <p>18 Q. I asked you about carfentanil, and</p> <p>19 I think you told us you hadn't seen or don't</p> <p>20 recall seeing a case this year.</p> <p>21 A. No, no, no. I didn't say I haven't</p> <p>22 seen a case this year.</p> <p>23 Q. I'm sorry.</p> <p>24 A. There's been a tremendous drop-off.</p> <p>25 Q. Okay. Sorry. I didn't mean to --</p>	<p style="text-align: right;">Page 65</p> <p>1 oxymorphone, hydromorphone, a lot of those</p> <p>2 prescription meds have really dropped off.</p> <p>3 Really dropped off the last couple years.</p> <p>4 Q. And we talked about carfentanil.</p> <p>5 But is a driver of the overdose deaths</p> <p>6 attributable to illicit drugs, is it</p> <p>7 methamphetamine these days and illicit</p> <p>8 Fentanyl?</p> <p>9 MS. KEARSE: Object.</p> <p>10 A. I'm seeing an uptick this year in</p> <p>11 meth. A big uptick. Methamphetamine, cocaine,</p> <p>12 and Fentanyl. Those are the big three right</p> <p>13 now.</p> <p>14 Q. And -- and methamphetamine and</p> <p>15 cocaine are not opioids or opioid derivatives,</p> <p>16 right?</p> <p>17 A. They are not.</p> <p>18 Q. Fentanyl is?</p> <p>19 A. Fentanyl is an opioid.</p> <p>20 MR. CHEFFO: Okay. We've been</p> <p>21 going about an hour. Do you want to take a</p> <p>22 five-minute break? Is that all right?</p> <p>23 THE WITNESS: Your call.</p> <p>24 MR. CHEFFO: It's actually more for</p> <p>25 me than for you.</p>

<p style="text-align: right;">Page 66</p> <p>1 THE WITNESS: That's fine.</p> <p>2 THE VIDEOGRAPHER: Off the record,</p> <p>3 10:02.</p> <p>4 (A recess was taken.)</p> <p>5 THE VIDEOGRAPHER: We're back on</p> <p>6 the record, 10:12.</p> <p>7 MR. CHEFFO: All right. We're back</p> <p>8 on, Mr. Perch.</p> <p>9 BY MR. CHEFFO:</p> <p>10 Q. Just a quick few followups on some</p> <p>11 of the things we were talking about earlier.</p> <p>12 You mentioned what I understood to</p> <p>13 be kind of a reference to trends in certain --</p> <p>14 I think you used the word "epidemics" or, you</p> <p>15 know, "drug crisis," right? There's -- in the</p> <p>16 '60s or '70s, there was LSD.</p> <p>17 MS. KEARSE: Object to form. I</p> <p>18 think you mischaracterized part of that.</p> <p>19 MR. CHEFFO: Did I mischaracterize</p> <p>20 that?</p> <p>21 MS. KEARSE: Yeah. I think you</p> <p>22 used the word "epidemic."</p> <p>23 A. Trends. The only time I think I</p> <p>24 used "epidemic" was for the carfentanil.</p> <p>25 Q. Okay. So there were -- trends in</p>	<p style="text-align: right;">Page 68</p> <p>1 Q. I'm sorry. Can I just say</p> <p>2 something? You know, I remember reading</p> <p>3 articles about Vietnam soldiers coming home --</p> <p>4 A. My friends.</p> <p>5 Q. -- with heroin addictions, right?</p> <p>6 A. Heroin, LSD, a lot of</p> <p>7 hallucinogenics. I think that era was big into</p> <p>8 hallucinogens: peyote, LSD, you know,</p> <p>9 mescaline. That kind of ended, and I don't</p> <p>10 know the exact years or dates.</p> <p>11 As I said, we had the draft back</p> <p>12 then, and, you know, I was looking for that</p> <p>13 number when they pulled my birthday. We didn't</p> <p>14 want to go to Vietnam. I had a lot of friends</p> <p>15 that did.</p> <p>16 But when that era ended, you know,</p> <p>17 it was a different time. Now, back then, when</p> <p>18 I first -- my first job was City Hospital in</p> <p>19 Akron. It was a clinical setting. We started</p> <p>20 forensics after I -- I set up toxicology.</p> <p>21 So I could look at -- it was a</p> <p>22 different setting because, again, a lot of our</p> <p>23 work was geared toward clinical work.</p> <p>24 Therapeutic drug monitoring was big, you know.</p> <p>25 You prescribe a drug, they want to make -- and</p>
<p style="text-align: right;">Page 67</p> <p>1 what, were you referring to?</p> <p>2 A. Trends in types of drugs that I</p> <p>3 would see. Just like I mentioned, this -- this</p> <p>4 year I'm seeing coke -- cocaine,</p> <p>5 methamphetamine, and Fentanyl.</p> <p>6 Q. And over -- if we were to go back</p> <p>7 the last 10, 20, 30 years, would it be fair to</p> <p>8 say there would be different trends? Like, so</p> <p>9 for example, in the '60s and '70s, it might</p> <p>10 have been LSD. In the '80s and '90s, it might</p> <p>11 have been cocaine and crack cocaine. Then</p> <p>12 there was -- are those the type of trends</p> <p>13 you're talking about?</p> <p>14 MS. KEARSE: Object to form.</p> <p>15 A. Yes. Sort of.</p> <p>16 Q. And that's just there's different,</p> <p>17 kind of, drugs of choice that seem to occur</p> <p>18 generationally; is that fair?</p> <p>19 MS. KEARSE: Object to form.</p> <p>20 A. In the '60s and '70s, yes, because</p> <p>21 there was a -- I felt that there was a</p> <p>22 subculture of drug abuse in the '60s and '70s.</p> <p>23 I grew up in the '60s and '70s. The Vietnam</p> <p>24 war and all those things were factored into</p> <p>25 that time.</p>	<p style="text-align: right;">Page 69</p> <p>1 they would follow the cases and make sure the</p> <p>2 person was compliant, the patient was</p> <p>3 compliant, or -- and they weren't abusing the</p> <p>4 drug, that kind of stuff. That was one aspect</p> <p>5 of it.</p> <p>6 And, of course, the other aspect</p> <p>7 was for the emergency room monitoring</p> <p>8 overdoses. So that was -- I was at City</p> <p>9 Hospital for 25 years and I've been with the</p> <p>10 medical examiner's about 17 and a half. Over</p> <p>11 that period of time, yes, I saw various trends.</p> <p>12 Q. Would -- would some of those be,</p> <p>13 you know, crack cocaine?</p> <p>14 A. Crack cocaine has been around quite</p> <p>15 a bit, yes.</p> <p>16 Q. And throughout that whole time,</p> <p>17 heroin has always been kind of a subtext? I</p> <p>18 mean, it's never disappeared, has it?</p> <p>19 MS. KEARSE: Object to form.</p> <p>20 A. Heroin was rare, at least in Summit</p> <p>21 County. In my opinion, I really don't think we</p> <p>22 saw much heroin until probably the last three,</p> <p>23 four years, maybe, when -- when -- probably the</p> <p>24 last two years was the biggest -- the most</p> <p>25 heroin I've seen in the 18 years that I've been</p>

<p style="text-align: right;">Page 70</p> <p>1 with the ME's office.</p> <p>2 Q. What about methamphetamine?</p> <p>3 A. Methamphetamine, again, wasn't very</p> <p>4 popular for a while, until -- and I'm</p> <p>5 guessing -- four or five years ago. It --</p> <p>6 it -- it really hit our area hot and heavy back</p> <p>7 then. Then it kind of died out, and now it's</p> <p>8 back again.</p> <p>9 Q. And what about cocaine?</p> <p>10 A. Cocaine has always been around. I</p> <p>11 don't know if it's -- and again, I don't know</p> <p>12 if it's the crack form or the powder form.</p> <p>13 That's why I just say it's cocaine. But it's</p> <p>14 always been around, and it ebbs and flows.</p> <p>15 Right now, we're -- we're at a peak of the</p> <p>16 hill, so to speak. We're -- we're seeing --</p> <p>17 I'm seeing a lot more than I normally see.</p> <p>18 But, you know, in a month from now,</p> <p>19 it may die down a little bit, but it's always</p> <p>20 been around.</p> <p>21 Q. In -- let me ask you just a few</p> <p>22 questions, since I have, you know, your</p> <p>23 expertise here, about the levels. Right?</p> <p>24 So I know you -- you -- you</p> <p>25 testified earlier a little bit about how the</p>	<p style="text-align: right;">Page 72</p> <p>1 Do you understand my question, sir?</p> <p>2 A. Yeah. Therapeutic versus toxic</p> <p>3 versus lethal.</p> <p>4 Q. Yes, sir.</p> <p>5 A. What level? Where does that level</p> <p>6 fall?</p> <p>7 Q. Yes, sir.</p> <p>8 A. Is there one standard? No.</p> <p>9 There's multiple standards. It's really whose</p> <p>10 reference are you looking at. There's a --</p> <p>11 there's a number of references that are highly</p> <p>12 reputable. One is the -- the book I always</p> <p>13 refer to is authored by Randall C. Baselt, and</p> <p>14 I think it's called "Toxic Drugs and Chemicals</p> <p>15 in Man." It's kind of my, quote, "Bible."</p> <p>16 Q. Uh-huh.</p> <p>17 A. It's got references for just about</p> <p>18 all the drugs that -- I think the current</p> <p>19 issue is the 8th or 9th Edition. It's a</p> <p>20 wonderful book.</p> <p>21 But there's others. The Allegheny</p> <p>22 County has come out with a little chart of,</p> <p>23 again, therapeutic/toxic/lethal levels.</p> <p>24 There's North Car- -- Chapel Hill,</p> <p>25 is that North Carolina?</p>
<p style="text-align: right;">Page 71</p> <p>1 assay levels, at least as I understood your</p> <p>2 testimony, were set essentially by a government</p> <p>3 standard, and then these companies that make</p> <p>4 these assays essentially create their products</p> <p>5 to meet the government standards.</p> <p>6 A. With the immunoassay screenings,</p> <p>7 yes.</p> <p>8 Q. And let me ask you just a</p> <p>9 different -- well, strike that.</p> <p>10 That's for detection levels, right?</p> <p>11 A. Correct.</p> <p>12 Q. Is there any rule of thumb or more</p> <p>13 than that, you know, scientific literature or</p> <p>14 standards, that would set toxic levels for --</p> <p>15 you know, for substances?</p> <p>16 Like we've probably all heard, you</p> <p>17 know, being non-toxicologists, the dose makes</p> <p>18 the poison, right? I think we've all heard if</p> <p>19 you drink enough water, it could be toxic.</p> <p>20 With that kind analogy, in other</p> <p>21 words, is there a certain kind of standard that</p> <p>22 says, you know, if you have one certain unit of</p> <p>23 cocaine, it's in your blood, you may have this</p> <p>24 illegally, but it's -- it's very unlikely to</p> <p>25 have been a cause of death or an overdose?</p>	<p style="text-align: right;">Page 73</p> <p>1 Q. Uh-huh.</p> <p>2 A. Their medical examiner has, again,</p> <p>3 a thing of -- like this with all the drugs and</p> <p>4 the various ranges of levels. And if you --</p> <p>5 and multiple others. And if you look at all</p> <p>6 these, they sort of overlap each other, and</p> <p>7 they're all a little different.</p> <p>8 Q. And do they do what you suggested;</p> <p>9 they'll basically tell you kind of a range of</p> <p>10 what would be a toxic level versus what might</p> <p>11 be therapeutic versus --</p> <p>12 A. Correct, they do. And they also --</p> <p>13 also warn you that you have to look at</p> <p>14 tolerance, route of ingestion, femoral or</p> <p>15 central blood. There's a lot of other things</p> <p>16 you need to look at, not just the number.</p> <p>17 Q. Right. Am I correct that it could</p> <p>18 even impact the individual, right? So in other</p> <p>19 words, a person who's a 350-pound male, 6 foot</p> <p>20 9, might have a different tolerance level than</p> <p>21 a male who's 5 foot, 120 pounds? Does that</p> <p>22 have an impact?</p> <p>23 A. It will have an impact on the</p> <p>24 amount of drug they need to take to get to that</p> <p>25 level. So a 300-pound individual will need a</p>

<p style="text-align: right;">Page 74</p> <p>1 lot more of the drug to get to 100 nanograms 2 per ml in his blood versus a 100-pound per -- 3 individual. But once they get to that level, 4 it's still the same level in that individual's 5 blood. It's 100 nanograms per ml. 6 As I said, one person may have to 7 take 1,000 milligrams, versus the other one may 8 only take 100 milligrams, but that level is 9 what you're looking at, the blood level. And 10 that level is pretty much consistent in terms 11 of toxicity, regardless of the weight. 12 More important is the tolerance, 13 route of ingestion. You know, did he snort it? 14 Did he inject it? Did he eat it? Those things 15 are much more relevant because that tells you 16 if the individual -- if the level was a big 17 bolus, a huge influx of drug, rather than a 18 slow time-release type of mechanism. 19 Q. I see. And so just by looking at a 20 blood level, it really doesn't tell us -- or we 21 can't really know how much that person 22 ingested; is that fair? 23 A. In my opinion, it's very difficult 24 to tell. 25 Q. And -- and you're happy to -- I'm</p>	<p style="text-align: right;">Page 76</p> <p>1 referenced, that would tell us that these 2 levels were such that they were in a toxic 3 level and perhaps some of the others weren't? 4 A. Every one of those is in a toxic, 5 potentially lethal level. 6 MS. KEARSE: For the record, are 7 you talking about 55236? 8 MR. CHEFFO: I am. I am. Yes, 9 thank you. 10 Q. Okay. And then, while you have 11 that in front of you, sir, would you be good 12 enough to look at page 7 of 46? 13 A. I'm sorry. Page 7? 14 Q. Yes, sir. I'm going to direct your 15 attention to the top of the page, which is 16 55356. 17 A. Okay. 18 Q. Now, in this case, there's a tox 19 result, "Methamphetamine present." Do you see 20 that? 21 A. I do. 22 Q. And that presumably would have been 23 something that would have been done in your 24 lab, right? You could have done it at that 25 time?</p>
<p style="text-align: right;">Page 75</p> <p>1 happy to have you look at this if it would 2 help. I was just trying to find an example. 3 But there are some times where 4 there's a number of -- there's a number of -- 5 there's a number of drugs listed, and the cause 6 of death doesn't include all of them. 7 So, yeah, actually the very first 8 one on the very first page, sir. You see all 9 the tox results there? 10 A. I do. 11 Q. And again, with the understanding 12 that I know you didn't make the call as to 13 cause of death and you probably don't know a 14 lot about this specific case without looking at 15 it, my question is more general, right, which 16 is you see that -- for example, look at 17 oxycodone, right? It's listed. 18 A. You know, you'd have to ask the 19 doc. Typically what they would rule on 20 something like that is acute mixed-drug 21 toxicity. Why he singled out meth and 22 Fentanyl, you'd have to ask them. 23 Q. Fair. But is there a -- from a 24 toxicological perspective, is there any 25 reference, including the ones that you've just</p>	<p style="text-align: right;">Page 77</p> <p>1 A. If I had a urine sample, that's 2 certainly one of the drugs I do. 3 Q. And then the cause of death is 4 non-traumatic intercerebral hemorrhage, a 5 stroke. Do you see that? 6 A. I do. 7 Q. It doesn't reference anything about 8 drug abuse or any- -- or anything about 9 metham- -- methamphetamine? 10 A. You know, I'm not exactly sure 11 where they put that. That may be under a 12 "Comment" field. We may not -- you know, 13 without seeing the entire autopsy report, it's 14 hard to say what he would have referenced. 15 Q. And I guess the question -- and if 16 you know. This may be outside your area. But 17 it's labeled here as an accidental drug 18 overdose, right? I'm looking at the last -- 19 the first two columns. It says -- do you see 20 that "Manner" and then "Type"? 21 A. Yeah. 22 Q. Do you know whether -- whether 23 there's a policy or procedure that even if 24 somebody has something like a stroke and they 25 have a positive methamphetamine, like in this</p>

<p style="text-align: right;">Page 78</p> <p>1 case, tox screening, that it's labeled as a 2 drug overdose? 3 A. I have no idea. 4 Q. That's not something that you deal 5 with? 6 A. No. 7 Q. Do you conduct any type of queries 8 of a database yourself, or do you ask other 9 folks to do that for you if you need it? 10 A. I ask other folks. 11 Q. Do you -- 12 A. I don't do it. 13 Q. Do you have access to a database or 14 a computer that has this information if you 15 wanted it? 16 A. I -- I do. I've never went in 17 there. I have my own databases that I use. 18 Q. Are you aware of any databases that 19 have -- or any formats that have more 20 information? Like, so in other words, if I 21 wanted to find out blood and urine for 22 everyone, could I query the database to do 23 that? 24 A. You know, I'm not sure. 25 Q. Okay.</p>	<p style="text-align: right;">Page 80</p> <p>1 you'll tell me that, as you have in the past 2 today. But in terms of setting the prices and 3 the billing -- like, in other words, are you 4 the person who determines, you know, if, for 5 example, XYZ PD department wants a tox screen, 6 it should be \$50, \$1,000? How does that work? 7 A. We set up pricing initially when we 8 first offered our services to outside clients. 9 And the county charter prevents us from making 10 money on our services, so it's more of a 11 professional courtesy, since there's really no 12 other toxicology services locally. 13 So we set the prices, I thought, 14 based -- we did a cost analysis and came up 15 with what was a fair and reasonable price. 16 It's a lot less than any reference lab charges. 17 And I forget exactly what was involved in 18 setting them up. 19 But then they have to be approved 20 by the Summit County council, and then they're 21 codified into the -- whatever government 22 program it is. And once you set them, it's 23 hard to change, so we pretty much stay with it. 24 And I just remember setting them up initially 25 when we -- years ago, and that's pretty much</p>
<p style="text-align: right;">Page 79</p> <p>1 A. I would assume you should be able 2 to. 3 Q. Do you know -- 4 MS. KEARSE: And I'm just going 5 to -- he's not going to guess. 6 But if you know. 7 Q. Are the -- are you aware of whether 8 medical records and tox information, or can -- 9 all information about a case is linked in some 10 way? 11 A. I have no idea. 12 Q. That would be something for the IT 13 folks? 14 A. I would imagine. 15 Q. Okay. You testified earlier, 16 Mr. Perch, that some -- it sounded like some 17 relatively significant portion of the work, at 18 least the tox work that's done by you on behalf 19 of the county, is also -- is done on behalf 20 or -- or essentially contracted by other 21 entities, like police departments? 22 A. I do work for other entities, and I 23 bill them for it, yes. 24 Q. And again, to the extent you're the 25 right person -- let me know if you're not, then</p>	<p style="text-align: right;">Page 81</p> <p>1 where we've been. 2 Q. And did you do that yourself, or 3 was that with someone like Dr. Kohler? 4 A. With Bob, who was our administrator 5 at the time, but he -- the reality of it is I'm 6 probably the one that decided on them, just 7 because I'm so familiar with what other 8 reference labs charge. 9 Q. Right. And you also had a good 10 sense of what the assays cost, how much time -- 11 A. Absolutely, I did. 12 Q. -- it took, so it made sense for 13 you to basically say here would be a fair 14 pass-through price; is that fair? 15 A. That's fair. 16 Q. So I take it the goal is -- is 17 neither to lose money nor make a profit; is 18 that generally what -- what you try to do? 19 A. Yeah. We try to make it 20 reasonable. Again, we're providing a service. 21 And I don't bill them for testimony, you know, 22 testifying in court. I don't bill them 23 additional fees. 24 Again, we're a county agency. 25 These are local law enforcement and government</p>

<p style="text-align: right;">Page 82</p> <p>1 agencies, so, you know, nobody has a lot of 2 money, and we try to be reasonable. 3 Initially, the prices that we 4 charged went to what we call a lab fund, and my 5 goal at that time was to buy one of the 6 \$300,000 instruments with that money. 7 Then when the economy soured a few 8 years back, what, seven, eight years ago, the 9 lab fund became part of the general fund. So I 10 gave up on that idea. But -- 11 Q. There went the machine. 12 A. Yeah. 13 Q. In terms of the last number of 14 years, and let's talk specifically about maybe 15 the carfentanil and the extra external testing, 16 has that been a driver of increased costs to 17 the tests? 18 A. Oh, absolutely. 19 Q. Significant? 20 A. I think it's significant. 21 Q. And is that -- is it fair to say 22 that -- 23 Well, let me ask you this. Is 24 carfentanil the main or only substance that you 25 feel the need to send out to a lab, or are</p>	<p style="text-align: right;">Page 84</p> <p>1 Q. So other than the -- and thank you 2 for that. 3 Other than the one-offs, like, you 4 know -- I'll say Benadryl since I can't 5 pronounce the chemical name -- is the -- is the 6 main substance that you've been sending out in 7 the last number of years, is it carfentanil? 8 A. Carfentanil was the biggie. 9 Q. Is there anything else that's kind 10 of in that range? 11 A. Not that I -- I can think of. 12 Q. So -- 13 A. That's way above and beyond 14 anything I've ever had to deal with. 15 Q. Is it fair to say that with respect 16 to heroin, you can do that all internally? 17 A. You've got to remember, I set up 18 assays based on the need to do them in-house 19 and cost savings and labor involved. So if I 20 have enough of a particular drug, I will set it 21 up in- -- in-house. 22 Q. Uh-huh. 23 A. Obviously, I do morphine and 24 heroin, Fentanyl, coke, all the normal stuff 25 that I typically -- oxycodone, hydrocodone,</p>
<p style="text-align: right;">Page 83</p> <p>1 there others? 2 A. Oh, there's others. Carfentanil 3 was the most significant in the last couple 4 years. But I get -- for example, I've had a 5 number of diphenhydramine overdoses. 6 Q. And what is that? 7 A. Benadryl. As I mentioned, you can 8 overdose on anything. When I first started 9 this work, I would say there was no way 10 anybody's going to die from abusing Benadryl. 11 I put my foot in my mouth being I'll never say 12 that again. Because we've had a number of 13 cases where -- you know, if you take enough of 14 any drug, you're going to -- it's potentially 15 lethal. And people want to kill themselves 16 with Benadryl, they'll drink -- they'll take 17 200 tablets, and they will die. 18 So do I set up a quantitative assay 19 for Benadryl or for diphenhydramine? No, I 20 don't, because, again, it's fairly rare. It's 21 much more cost effective to send out the rare 22 overdoses that I see to a reference lab, pay my 23 150 bucks. It's very time consuming and labor 24 intensive for me to set up an assay, so it's a 25 lot cheaper just to send it out.</p>	<p style="text-align: right;">Page 85</p> <p>1 oxymorphone. Not only do I set them up 2 in-house, I also perform -- those are drugs 3 involved in national proficiency surveys that I 4 have to perform well on. So, yeah, those -- 5 those assays I set up in-house. 6 So the esoteric drugs that I get 7 are the ones I typically send out. 8 Q. You mentioned \$150. Is that -- is 9 that what a carfentanil test typically costs? 10 A. That's my price. That's a 11 discounted price, yes. 12 Q. And I -- I take it this year, as 13 we've talked about, as the incidents of 14 carfentanil has gone down, the cost to the 15 medical examiner for external -- external 16 testing has also gone down. 17 MS. KEARSE: Object to form. 18 A. It has. It has for reference labs. 19 Now, they did buy me a new mass spec, which was 20 a \$100,000 piece of instrument -- piece of 21 equipment. And again, the reason being over 22 the last two or three years, my equipment was 23 non-stop in use. I mean, there were times when 24 I would -- I had -- I had three mass specs. 25 One was actually way too old, I rarely used.</p>

<p style="text-align: right;">Page 86</p> <p>1 But basically two functioning mass specs. 2 And at times in the evening before 3 I went home from work, I would set up the auto 4 samplers and they would run overnight. I was 5 getting quite a few as- -- you know, our 6 volume, not just for carfentanil, but just the 7 whole caseload, the problem is when you triple 8 the amount of deaths and your caseload goes up, 9 it's not just the carfentanil assay goes up. 10 It's all the aspects of doing that standard 11 drug screen that go up with it. 12 So I've got three times as many 13 immunoassay runs, alcohols, the whole gamut of 14 stuff. 15 Q. Is it your experience that when you 16 find overdoses, that as a general matter people 17 also are abusing alcohol? When you find drug 18 overdoses. 19 MS. KEARSE: Object to form. 20 A. I didn't see any special trend 21 related to alcohol and drugs. Alcohol is 22 alcohol. Everybody is abusing alcohol whether 23 you do drugs or not. 24 Q. And from your perspective, is it -- 25 is it -- well, let me just ask you this. When</p>	<p style="text-align: right;">Page 88</p> <p>1 that? 2 A. Correct. 3 Q. And that -- that's important. If 4 you want to understand the full story, you have 5 to put all those pieces together. 6 A. In my -- 7 MS. KEARSE: Object to form. 8 A. In my opinion, yeah. Those are 9 important pieces of the puzzle, yes. 10 Q. And there's probably others, 11 depending on the facts of the case. 12 A. There's -- obviously, the autopsy 13 is an important facet of that. 14 Q. How much communication, to the 15 extent you know, is there between let's take 16 the Summit County Police Department or other 17 law enforcement in Summit County and the ME? 18 And I'm maybe going to ask you to focus on the 19 fact, right, there was this two- or three-week 20 period or weekend, it sounds like maybe, where 21 the Fentanyl problem, serious problem, started 22 in, it sounds like, 4th of July 2016, you know, 23 continued for some period of time, but then it 24 trailed off. 25 I mean, is that because of a</p>
<p style="text-align: right;">Page 87</p> <p>1 you are doing your tox study based on kind of 2 your visibility into a limited amount of this 3 person's existence, you can't really determine 4 whether they're an abuser or whether it was a 5 one-time event; is that right? 6 MS. KEARSE: Object to form. 7 A. Not by itself. Not just by the 8 analysis. As I said, I do look at the 9 investigator's report. They interview family 10 members, neighbors. There's a lot of 11 information on that report. 12 Q. Sure. And that's -- that's a fair 13 point. But -- and let's talk about that. 14 So just looking at bare toxicology 15 records, you couldn't determine whether someone 16 was an abuser or what brand of drug they took, 17 if it was prescription or things like that, 18 right? 19 A. Not -- in most cases, no. 20 Q. But to the extent that you wanted 21 to find out some more information, that's why 22 people like the investigators go out, that's 23 why they talk to family members, that's why 24 they look at medical records, right? That's 25 why they may interview employers, things like</p>	<p style="text-align: right;">Page 89</p> <p>1 communication between the ME's office testing 2 and some kind of interaction, in your view, 3 with the police department? 4 MS. KEARSE: I'll object to the 5 form. 6 But go ahead. Go ahead. 7 Q. Do you understand my question, sir? 8 A. Yeah, I do. Remember, I'm the 9 police department too. 10 Q. Right. 11 A. So I was -- I was in a unique 12 situation that Cleveland, Columbus, Cincinnati, 13 they weren't. They weren't in that unique 14 situation. 15 It's a lot easier to test 16 contraband. It's very easy to test contra- -- 17 contraband, meaning the powders and the 18 residue. It's so concentrated. And mass specs 19 are very, very sensitive. As I mentioned, one 20 nanogram per ml is such a -- such a low level. 21 Residue that you don't even see on 22 a spoon, you just take a little bit of methanol 23 to just -- to brush the spoon and inject that 24 on the mass spec, it will blow your instrument 25 away there's so much there.</p>

<p style="text-align: right;">Page 90</p> <p>1 So the point being, I'm at Akron 2 Police Department. I see what we're seeing 3 there on a weekly basis. My partner, his name 4 is Mike. I don't know if that's relevant. But 5 anyway, him and I communicate well. Again, we 6 both work together there. Now, granted, I may 7 not go in there for a couple weekends, but 8 initially we were getting swamped over there. 9 So, yes, I was seeing all kinds of 10 paraphernalia, and the bulk of it was 11 carfentanil. So I go back to my lab at the 12 ME's office, obviously I'm -- I -- I would 13 coordinate the cases of -- of the contraband 14 with the ME's office, and numerous times the 15 dead person was -- was the paraphernalia they 16 had at the Akron Police Department. 17 So right off the bat, I -- you 18 know, carfentanil, carfentanil. I can 19 correlate that, the paraphernalia with my case. 20 So that was a big plus. 21 The people in Cuyahoga County and 22 Franklin County and Hamilton, they didn't have 23 that opportunity. They -- they were 24 independent laboratories, and much bigger 25 laboratories.</p>	<p style="text-align: right;">Page 92</p> <p>1 aspects of it. You know, the reason they're 2 behind, at least if you ask them, in one area, 3 is because they don't have enough equipment, 4 they don't have enough people, they don't 5 have whatever. And it's a much bigger 6 municipality. You know, Columbus and Cleveland 7 are a lot bigger than Akron. 8 A lot of the law depart- -- a lot 9 of the -- there's a state crime lab known as 10 BCI. There's three laboratories throughout 11 Ohio. And probably -- I don't know what 12 percentage of law enforcement, but the bulk of 13 the law enforcement sends their stuff to the 14 BCI labs, their paraphernalia. The contraband 15 found at a scene or the arrest made and the 16 powder that they find on the individual, all 17 that stuff goes to BCI. 18 And BCI is -- was -- at least for a 19 long period of time, they were months behind. 20 On testing stuff that came in today, they might 21 not get to it for a couple months. So there's 22 that lag. And -- and I -- and I think the 23 reason they were giving is just because the 24 volume was so -- so high, they just couldn't 25 keep up.</p>
<p style="text-align: right;">Page 91</p> <p>1 Even Cleveland, they didn't have 2 that opportunity. As a matter of fact, I would 3 call Cleveland -- I knew everybody up there -- 4 and talk to their tox department and say, "Are 5 you guys seeing any carfentanil? How about in 6 the drug lab?" You know. 7 He says "Oh, they're way behind. 8 They're a month behind. They haven't even 9 analyzed any of that stuff yet." 10 So there was a tremendous time gap 11 between some of the bigger laboratories of what 12 they were seeing in their drug lab versus what 13 they were seeing in a tox. And again, that's 14 one of the reasons, I think, that we were the 15 first to see the carfentanil issues. 16 Q. Is that -- in your professional 17 kind of view, is that an area of just from a 18 public health/public service perspective, there 19 could be areas of provement -- improvement of 20 having better communication between the 21 different municipalities and the labs? 22 MS. KEARSE: Object to form. 23 A. You know, I don't know if it's just 24 a matter of communication. I think it's a 25 matter of personnel and money and all the other</p>	<p style="text-align: right;">Page 93</p> <p>1 Q. And -- and to the extent, again, 2 that you've seen it through kind of your dual 3 experience, both with the Summit County medical 4 examiner and with the police department, do -- 5 do you have a view or do you believe that some 6 of the drop-off this year that you've seen in, 7 let's say, carfentanil, for example, has been 8 because, you know, with the knowledge from the 9 medical examiner's office, the knowledge of the 10 police department, law enforcement has kind of 11 targeted or made efforts to eradicate some of 12 the -- the activity with respect to 13 carfentanil? 14 MS. KEARSE: Object to form. 15 A. Oh, I think that's a big factor. 16 The other factor is probably more of a 17 political nature. I think it's all coming from 18 China, and it's just -- and whatever happened, 19 the Chinese cracked down on it. 20 Part of my role at the police 21 department is I would see these packages that 22 were shipped overseas, FedEx, U.S. mail, with 23 all kinds of Chinese caricatures. I'm assuming 24 they were Chinese. They could be any 25 oriental -- you know, the little alphabet.</p>

<p style="text-align: right;">Page 94</p> <p>1 I'm not a Chinese ex- --</p> <p>2 Q. I understand.</p> <p>3 A. But, you know, so my impression is</p> <p>4 this stuff is all being shipped from overseas.</p> <p>5 Q. So that was -- that was the type of</p> <p>6 thing you were testing, right, because that was</p> <p>7 the --</p> <p>8 A. Correct.</p> <p>9 Q. -- contraband.</p> <p>10 A. Yes.</p> <p>11 Q. And it was -- it looked to you like</p> <p>12 it was coming in from overseas?</p> <p>13 A. Overseas. Some of it had --</p> <p>14 actually, a lot of it was from -- with British</p> <p>15 postmarks. I don't know if the -- I don't know</p> <p>16 why.</p> <p>17 But it was all -- bulk of it was</p> <p>18 overseas. And we would test it, again, for</p> <p>19 sentencing purposes and whatever. It was all</p> <p>20 carfentanil. It was a humongous amount of</p> <p>21 carfentanil.</p> <p>22 Q. And -- and is that -- is -- did,</p> <p>23 you know, is that your conclusion that a lot of</p> <p>24 the street drugs are coming in from Mexico and</p> <p>25 England and -- and China or Asia?</p>	<p style="text-align: right;">Page 96</p> <p>1 meth and the coke is probably much more -- are</p> <p>2 probably more local, at least the meth. But I</p> <p>3 don't know exactly where it's coming from, no.</p> <p>4 Q. Is there a -- again, in kind of</p> <p>5 your dual role, to the extent that you know, to</p> <p>6 the extent that there -- let me -- let me</p> <p>7 strike that.</p> <p>8 Let's take meth increase currently,</p> <p>9 you know, that you've seen. Is that something</p> <p>10 that in some way, either formally or</p> <p>11 informally, gets filtered to the police</p> <p>12 department?</p> <p>13 In other words, "Hey, you know, I'm</p> <p>14 seeing a lot of folks in the ME's department</p> <p>15 that are now overdosing on meth. Is it</p> <p>16 something about this meth? Is it more</p> <p>17 prevalent?" Is that something that you or</p> <p>18 someone else would tell the police department</p> <p>19 so that they could determine if it's something</p> <p>20 that they want to try to address?</p> <p>21 MS. KEARSE: Object to form.</p> <p>22 Q. Do you understand my question?</p> <p>23 A. Yeah.</p> <p>24 Not really. I think they know as</p> <p>25 much as we do what's around. I mean, they</p>
<p style="text-align: right;">Page 95</p> <p>1 MS. KEARSE: Object to form.</p> <p>2 A. At that time. At that time, yes.</p> <p>3 Now I have no idea.</p> <p>4 Again, I don't -- since -- things</p> <p>5 are changed this year in terms of what I'm</p> <p>6 seeing. So now, since I'm seeing meth and coke</p> <p>7 and regular Fentanyl and what I read in the</p> <p>8 paper about what kind of -- I think possibly</p> <p>9 the Fentanyl is probably coming in from Mexico,</p> <p>10 and this is strictly guesswork.</p> <p>11 MS. KEARSE: And I'm just going to</p> <p>12 say, we just -- I want to -- we're not going to</p> <p>13 guess today, so I think --</p> <p>14 THE WITNESS: Yeah.</p> <p>15 MS. KEARSE: -- that Counsel will</p> <p>16 appreciate that as well. We -- this is for</p> <p>17 what you know as a fact witness.</p> <p>18 Q. You have an educated view. This is</p> <p>19 what you do every day of your life, right? I</p> <p>20 mean, it's not really guessing.</p> <p>21 A. It is guessing.</p> <p>22 Q. Okay.</p> <p>23 A. I have no idea -- where it's</p> <p>24 actually coming from. It could be down the</p> <p>25 street from us. But, again, I suspect that the</p>	<p style="text-align: right;">Page 97</p> <p>1 confiscate the stuff, and we just -- I don't --</p> <p>2 I don't even bother looking at the APD stuff</p> <p>3 anymore because it's all basic stuff again.</p> <p>4 You know, Fentanyl.</p> <p>5 The reason I was more in tune</p> <p>6 during the carfentanil issue is because of my</p> <p>7 limits in -- in technology, my technological</p> <p>8 limits in testing for it.</p> <p>9 Q. I see, okay. Let me show you --</p> <p>10 this is the article I think I mentioned earlier</p> <p>11 that you at least were one of the folks who</p> <p>12 worked on it.</p> <p>13 MR. CHEFFO: I'm sorry. We need to</p> <p>14 mark it. My apologies.</p> <p>15 - - - - -</p> <p>16 (Thereupon, Deposition Exhibit 2,</p> <p>17 Article Titled "Carfentanil and</p> <p>18 Current Opioid Trends in Summit</p> <p>19 County, Ohio" was marked for</p> <p>20 purposes of identification.)</p> <p>21 - - - - -</p> <p>22 Q. I don't think I'm going to test</p> <p>23 your memory on super-specific details about</p> <p>24 this, Mr. Perch, but you could look at it if</p> <p>25 you like. And, obviously, if there's anything</p>

<p style="text-align: right;">Page 98</p> <p>1 that I do ask that you don't remember and you 2 need to look at it, I'm certainly not going to 3 stop you. In fact, I'd encourage you. But 4 maybe we can just start general, and if you 5 need to look at it in more specifics, you will. 6 Can you just tell us, just 7 generally, kind of what the purpose of this was 8 and why it came to be and what your role was? 9 A. My role was very minimal. Kristy 10 was one of our pathology -- or one of our 11 residents from City Hospital. They do a 12 rotation through our facility. I think it's a 13 six-week rotation. 14 And I think she was -- she was 15 interested in being a -- I think she was in 16 pathology. And I don't -- you know, she 17 approached me. She wanted to do some data 18 research. And my role was I allowed her access 19 to all my files. That was my role. 20 She wanted to go back and look at 21 all the cases and wanted to know how -- what 22 the easiest way was, and basically I said, you 23 know, the easiest way is to actually look 24 through each individual file, log down what you 25 see. You know, if you're interested in how</p>	<p style="text-align: right;">Page 100</p> <p>1 arrest to find out if -- if some paraphernalia 2 or some -- 3 A. Yeah. 4 Q. -- somebody was positive? 5 A. I do quite a bit of that. As I 6 mentioned, I do a lot of contract work for law 7 enforcement agencies. 8 Q. And that's not just in connection 9 with looking at the decedent; that could be for 10 other testing; is that right? 11 A. DUIs, whatever. 12 Q. Okay. So was she focused only on 13 deaths; do you know? 14 A. You know, I'm not sure. 15 Q. Okay. But whatever she was 16 focused, you -- you have materials in a way 17 that she was able to essentially roll up her 18 sleeves -- 19 A. Yeah. 20 Q. -- and go look at it, right? 21 A. I told her, you know, I -- the best 22 I can do is allow you access to my information. 23 I can't help you, because I'm -- I'm a one-man 24 show and I have tons of work to do. 25 Q. And she was able to go through</p>
<p style="text-align: right;">Page 99</p> <p>1 many this, how many that, start writing them 2 down. 3 And she did that for weeks, would 4 go in -- all my files are stored in boxes with 5 the dates and case numbers, range on there. So 6 she -- and most of my results are on the -- and 7 it's in a manila folder, and I write the stuff 8 out. On the cover of that manila folder is all 9 my data. Again, that's strictly for me. 10 Q. And can I just stop you for a 11 minute? Thank you for that. 12 Was she focused, to your knowledge, 13 only on data that related to overdose deaths, 14 or, in this case, carfentanil deaths? 15 A. I -- 16 Q. Do you know? 17 A. I really don't know. 18 Q. Okay. And when you say all of 19 your -- your data is organized -- well, let 20 me -- let me strike that. 21 Is all of the work that the ME's 22 department does, is it only related to deaths? 23 Like, in other words, would you -- would you do 24 a tox screen for a police department in the 25 ME's office that was just in connection with an</p>	<p style="text-align: right;">Page 101</p> <p>1 and -- did she do this by herself; do you know? 2 A. I'm not even -- I'm not sure. She 3 may have had one of the students help her. 4 They have a variety of students that come 5 through there. 6 Q. Okay. I mean, she didn't bring an 7 army of people in, right? 8 A. No. 9 Q. And so it was either her and maybe 10 one other person or maybe even two -- two 11 helpers? 12 MS. KEARSE: Object to form. 13 A. Again, I don't know. 14 Q. Okay. And she went through the 15 materials in a way that you had previously 16 organized, right? 17 A. I'm assuming. I know she went 18 through my boxes. You know, that was her -- 19 she wants to write an article, more power to 20 her. I really didn't care about -- too much 21 about it. I'm surprised she even put my name 22 on it. 23 Q. And I -- and I -- like I said, I'm 24 not going to -- as I think you'll find, I'm not 25 going to ask you specific questions about</p>

<p style="text-align: right;">Page 102</p> <p>1 this --</p> <p>2 A. No, please.</p> <p>3 Q. -- because I think you've told me</p> <p>4 that this is not your area of expertise.</p> <p>5 A. This is -- no. You know, I proofed</p> <p>6 it to make sure it sounded reasonable. And I'm</p> <p>7 not sure how -- I remember proofing it. I made</p> <p>8 some corrections that were technical</p> <p>9 corrections, and I didn't really pay much</p> <p>10 attention to the data. I really didn't.</p> <p>11 Q. Okay. I mean, look, it's fair to</p> <p>12 say if you saw something that was glaringly</p> <p>13 wrong, you would have pointed it out, right?</p> <p>14 A. I hope.</p> <p>15 Q. Right. But you didn't look at this</p> <p>16 as -- the sum and substance of this as</p> <p>17 something that was your job to kind of edit or</p> <p>18 correct, right?</p> <p>19 A. I -- I helped to the best of my</p> <p>20 ability.</p> <p>21 Q. Okay. And I'm going to ask you</p> <p>22 just some -- just a few process questions.</p> <p>23 Not -- just about how kind of what this -- this</p> <p>24 woman, Ms. Kristy Waite, was -- was -- had</p> <p>25 access to.</p>	<p style="text-align: right;">Page 104</p> <p>1 know, is relatively specific, would you agree?</p> <p>2 A. It's specific for the drugs that</p> <p>3 she's interested in, yes.</p> <p>4 Q. Right. And -- and I take it that</p> <p>5 you can't independently verify whether these</p> <p>6 are correct or not, right?</p> <p>7 A. Well, she probably took them --</p> <p>8 well, I'm assuming she -- I cannot.</p> <p>9 Q. Okay. But -- but at least in</p> <p>10 looking at this chart, there's a -- there's a</p> <p>11 fair level of specificity from 2009 to 2016</p> <p>12 that talks about the number of cases where</p> <p>13 illicit drugs were involved in a death.</p> <p>14 MS. KEARSE: Object to form.</p> <p>15 Q. Isn't that what this chart</p> <p>16 essentially does?</p> <p>17 A. Overdose cases per year by drug,</p> <p>18 yes.</p> <p>19 Q. And in looking at this, are these</p> <p>20 trends or numbers, are they consistent with</p> <p>21 your recollection?</p> <p>22 A. I'm going to say yes. Pretty</p> <p>23 close.</p> <p>24 Q. All right. For example, look at</p> <p>25 2015, right? There's -- you don't even have</p>
<p style="text-align: right;">Page 103</p> <p>1 So there were files that were kind</p> <p>2 of under your control that she was able to look</p> <p>3 at and mine for whatever information she</p> <p>4 thought was appropriate; is that right?</p> <p>5 A. Sounds about right.</p> <p>6 Q. And do you know how long she took?</p> <p>7 Was it a few weeks?</p> <p>8 A. Quite a while, it seemed like.</p> <p>9 Certainly weeks and weeks. Possibly --</p> <p>10 probably more like months.</p> <p>11 Q. And she -- she took data and</p> <p>12 information or whatever she thought she needed</p> <p>13 to prepare this -- this paper, right?</p> <p>14 A. I'm assuming.</p> <p>15 Q. And --</p> <p>16 MS. KEARSE: Again, I'm just going</p> <p>17 to say, you know, the guessing. Just what you</p> <p>18 know.</p> <p>19 MR. CHEFFO: Okay.</p> <p>20 Q. Look at page, if you would -- I</p> <p>21 think it's the fourth page, Mr. Perch. It says</p> <p>22 here page 636 on it. It's got these bar</p> <p>23 charts. Do you see this one?</p> <p>24 A. Yeah. Oh, yeah.</p> <p>25 Q. So, I mean, this data is -- you</p>	<p style="text-align: right;">Page 105</p> <p>1 anything for carfentanil, right?</p> <p>2 A. Yes.</p> <p>3 Q. And then it's the last one on the</p> <p>4 right. There's two red, so it's a little</p> <p>5 confusing. But you see all the way over on the</p> <p>6 right?</p> <p>7 A. Right.</p> <p>8 Q. Right. Then 2016 you see</p> <p>9 carfentanil is almost twice everything else.</p> <p>10 A. Correct.</p> <p>11 Q. Right? And then you see heroin</p> <p>12 is -- there's a -- kind of a jump from 2009 to</p> <p>13 '10, and then '10 to '12 with a dip in '11.</p> <p>14 But it's -- it's relatively consistent that</p> <p>15 there are heroin deaths from 2009 to 2016,</p> <p>16 right?</p> <p>17 A. Well, I -- I would have to say that</p> <p>18 it doubled from 2009 to 2016.</p> <p>19 Q. Okay. And it -- and it dropped in</p> <p>20 2011, and -- but it -- okay. And, fair. And</p> <p>21 so it doubled.</p> <p>22 There's -- and methamphetamines,</p> <p>23 how would you characterize that?</p> <p>24 A. Big increase in 2016.</p> <p>25 Q. And that's consistent with your</p>

<p style="text-align: right;">Page 106</p> <p>1 recollection, right?</p> <p>2 A. Yes.</p> <p>3 Q. And cocaine?</p> <p>4 A. 2016 was a big year, wasn't it?</p> <p>5 Q. It was. But prior to that, there</p> <p>6 was a -- is it fair to say relatively</p> <p>7 consistent with some ups and downs?</p> <p>8 A. Right.</p> <p>9 Q. Doesn't include hydrocodone or</p> <p>10 oxycodone on this; is that right?</p> <p>11 A. I don't see it, no.</p> <p>12 Q. And then if you look at 638, which</p> <p>13 is another -- this is a pie chart.</p> <p>14 My understanding of this -- and you</p> <p>15 tell me if it's -- if you could either tell me</p> <p>16 I'm right or wrong or I need to look at it --</p> <p>17 is that Figure 3 shows the percentage of cases</p> <p>18 where it's carfentanil only, and then the</p> <p>19 breakdown of other drugs or substances that</p> <p>20 were found in addition to carfentanil?</p> <p>21 A. That would be my understanding as</p> <p>22 well.</p> <p>23 Q. So if we were going to report out</p> <p>24 the Summit County deaths --</p> <p>25 Do you know if the data on -- I'm</p>	<p style="text-align: right;">Page 108</p> <p>1 believe that this is inaccurate?</p> <p>2 A. No, but it's not all-inclusive</p> <p>3 either. Again, she took five drugs, and why</p> <p>4 those five drugs -- I'm assuming because,</p> <p>5 again, I really don't know why she picked those</p> <p>6 five drugs, but they're -- as you mentioned,</p> <p>7 there's some other drugs that she omitted, and</p> <p>8 I'd be curious to see what those levels were.</p> <p>9 Q. Do you know if any other drugs</p> <p>10 would be higher than methamphetamines?</p> <p>11 A. I wouldn't know.</p> <p>12 Q. Okay. Let's come back to that in a</p> <p>13 minute. But let me show you another document.</p> <p>14 THE VIDEOGRAPHER: Can I change the</p> <p>15 tape before we continue on?</p> <p>16 MR. CHEFFO: Sure.</p> <p>17 THE VIDEOGRAPHER: Thank you.</p> <p>18 MR. CHEFFO: He's going to change</p> <p>19 the tape.</p> <p>20 THE VIDEOGRAPHER: We're off the</p> <p>21 record.</p> <p>22 (A recess was taken.)</p> <p>23 - - - - -</p> <p>24 (Thereupon, Deposition Exhibit 3,</p> <p>25 Document Titled "Annual Report, With</p>
<p style="text-align: right;">Page 107</p> <p>1 going to ask you to turn back to Figure 1. Is</p> <p>2 that data only for Summit County?</p> <p>3 A. I don't know.</p> <p>4 Q. Okay.</p> <p>5 A. I would imagine it says somewhere</p> <p>6 in this report.</p> <p>7 Q. I think -- and I'm -- it's not a</p> <p>8 trick question. I was looking as well,</p> <p>9 Mr. Perch. I think right above that, it</p> <p>10 says -- I'm in this -- right over here, sir.</p> <p>11 From July 2016 through --</p> <p>12 A. Oh, in Summit County. I see it.</p> <p>13 Q. Right. Right. It talks about --</p> <p>14 and then it says 140 carfentanil-related</p> <p>15 deaths, and that's consistent with the chart,</p> <p>16 right?</p> <p>17 A. Yes.</p> <p>18 Q. So if we wanted to kind of</p> <p>19 accurately portray the most prevalent deaths</p> <p>20 from drugs in Summit County, we would include</p> <p>21 heroin, methamphetamine, cocaine, carfentanil,</p> <p>22 and Fentanyl?</p> <p>23 MS. KEARSE: Object to form.</p> <p>24 A. Based on this article, yes.</p> <p>25 Q. And do -- do you have any reason to</p>	<p style="text-align: right;">Page 109</p> <p>1 Five Year Statistical Trend, 2016,"</p> <p>2 SUMMIT_000022367 to 000022438, was</p> <p>3 marked for purposes of</p> <p>4 identification.)</p> <p>5 - - - - -</p> <p>6 THE VIDEOGRAPHER: We're back on</p> <p>7 the record, 11:05.</p> <p>8 BY MR. CHEFFO:</p> <p>9 Q. So I'm going to ask you a question</p> <p>10 or two, maybe more than two, about the annual</p> <p>11 report. But before we leave the paper, let me</p> <p>12 just ask you a few questions, and as you have,</p> <p>13 you'll tell me if you remember, if it's in your</p> <p>14 area of expertise, or if you don't. And I</p> <p>15 agree, we don't want you to guess, okay?</p> <p>16 So let's just look at the</p> <p>17 "Conclusion," which is on the last page. I'm</p> <p>18 going to read it. Tell me if this is</p> <p>19 generally -- if you agree with this. It says,</p> <p>20 "Multiple state and countywide initiatives have</p> <p>21 been implemented to combat this dangerous</p> <p>22 epidemic. The need for up-to-date and highly</p> <p>23 sensitive testing is crucial for the direct</p> <p>24 detection of drugs, which are lethal at low</p> <p>25 concentrations, such as carfentanil and other</p>

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1 Fentanyl analogues. States without centralized
2 medical examiner systems are less likely to be
3 able to identify the specific drug involved in
4 an overdose than states with a centralized
5 system.
6 "Synthetic illicit opioids produced
7 in chemistry laboratories have become a
8 recurrent aspect of the heroin supply. They
9 are easy to produce and cheap for users to
10 obtain, but have created an urgent need for
11 updated sensitive technology methods for
12 treatment centers, criminal justice labs, and
13 especially medical examiner's offices."
14 Do you agree with that?
15 A. For the most part, yes.
16 Q. Anything you take issue with?
17 A. The -- and I'm a proponent of
18 centralized medical examiner's systems. I'm
19 not exactly sure how -- other than the -- the
20 communication issues, that they'd be less
21 likely to be able to identify the specific -- I
22 guess I do agree with that.
23 Q. Does -- is Summit County's system,
24 medical examiner's office, would that be
25 considered a centralized medical examiner

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1 system?
2 A. I got the impression that she was
3 talking about the state level.
4 Q. Do you know if Ohio has it at the
5 state level?
6 A. No, they do not.
7 Q. And the last thing I think I want
8 to ask you, if you would be good enough to turn
9 to 634. It's -- I'm going to read it again so
10 you don't have to. It's the second paragraph
11 in the "Methods" section. Tell me if I read
12 this correctly.
13 It says, "The SCMEO utilizes two
14 urine-based immunoassays for routine screening
15 tests, one for drugs of abuse and the other for
16 Fentanyl and its analogues. A Fentanyl screen
17 was not part of routine testing prior to June
18 2014, when the nation was experiencing an
19 opioid epidemic, mostly due to heroin and
20 illicit Fentanyl. Quantification and
21 confirmation of all positive drug screens are
22 performed by GC/MS."
23 Do you see that?
24 A. I do.
25 Q. Did I read it correctly, and do you

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1 agree with it?
2 MS. KEARSE: Object to form.
3 Q. Well, let me ask you since, there
4 was an objection. I have to ask you, now, two
5 questions.
6 Did I read it correctly?
7 A. You did.
8 Q. Do you agree with it?
9 A. I'm not exactly sure where she got
10 the 2014 date. I was screening Fentanyl quite
11 a bit sooner than that, prior to that.
12 Q. Okay. So other than that -- we'll
13 talk about that in a little bit, but anything
14 else in that paragraph that you would modify?
15 A. You know, she's making conclusions,
16 so I'm assuming -- I'm going to have to assume
17 that her conclusions are correct. But, yeah, I
18 generally agree with that.
19 Q. And she does say -- and I don't
20 know if this changes your -- your testimony or
21 not, but it says "a Fentanyl screen was not
22 part of routine testing."
23 Were you doing routine testing
24 prior to June 2014 for Fentanyl?
25 A. Oh, the "routine" does make a

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1 difference. I -- I was probably screening for
2 Fentanyl in tox cases that I deemed necessary
3 to screen. In other words, a 93-year-old, I
4 doubt if I'm going to screen them for Fentanyl.
5 It was a much more expensive assay, and it was
6 on my second wheel of reagents, so I would
7 actually literally have to switch the
8 instrument over. So that makes sense.
9 Q. And now it's --
10 A. Now it's a part of the routine
11 screening.
12 Q. It would probably be harder to not
13 do it than it would be to do it, right?
14 A. Exactly.
15 Q. And then -- so I'm now going to
16 direct your attention to this annual report.
17 It's the big document, 2016.
18 Have you -- are you generally
19 familiar -- again, I'm not going to ask you any
20 detailed questions about this because I -- my
21 guess is you're going to tell me you don't
22 prepare this report; is that right?
23 A. I do not.
24 Q. Okay. But you're generally
25 familiar that the medical examiners --

<p style="text-align: right;">Page 114</p> <p>1 MR. CHEFFO: I gave them one 2 already. 3 Q. -- does produce an annual report? 4 A. I am familiar that they do, yes. 5 Q. So do you flip through or kind of 6 review, in some fashion, the annual report when 7 it comes out or when it goes around? 8 A. Maybe the very first time. I don't 9 think I've looked at one of these in years. 10 Q. Okay. As to this 2016 one, did you 11 look at it with any purpose of editing or 12 providing comments? 13 A. What I typically do is I give them 14 my numbers. He asked me for my total drug 15 screens for the year from in-house cases and 16 outside agencies, meaning forensic cases, and I 17 give him those numbers, and that's pretty much 18 the extent of my input into this. 19 Q. So -- and when you say "those 20 numbers," there's probably, you know, several 21 data points, right? In other words, how many 22 you've done -- 23 A. Correct. 24 Q. -- right? What -- what drugs 25 you've found, right, with some prevalence?</p>	<p style="text-align: right;">Page 116</p> <p>1 other coroners' offices that we bill for, and I 2 do the same thing. I just see how many reports 3 I wrote. 4 Q. And if -- if someone wanted to find 5 out -- and let's talk about the -- whatever 6 number of cases it was just for Summit County, 7 after you've identified those specific cases, I 8 through 600, 200, whatever the number is, if I 9 wanted to know how many of those cases involved 10 methamphetamine, for example, would I be able 11 to do that through some type of search? 12 A. Yes. 13 Q. It's not paper, right? It's on a 14 computer system? 15 A. It's on -- after I generate a 16 hard-copy report, I give my reports to the 17 secretary, who notarizes that report and also 18 enters all that data into the medical 19 examiner's computer system, which Pat has. Pat 20 Gillespie has had the control over that, so he 21 would be the individual that would pull up the 22 specific search request. 23 Q. Okay. And that's -- that's 24 helpful. So let -- let me just take even a 25 step back in some of the documents.</p>
<p style="text-align: right;">Page 115</p> <p>1 A. Right, yes. 2 Q. What drugs you've found in tox 3 screenings, which ones are most likely related 4 to cause of death? 5 A. No, no. I -- he pulls all that up. 6 I'm not sure how he pulls all that up, but he 7 does a query on -- on -- on the computer. He 8 pulls all that -- that kind of data up. I just 9 give him total numbers. 10 Q. And I'm sorry. Total numbers of -- 11 of what? 12 A. Cases. 13 Q. Cases. 14 A. Summit County cases. Let's say 15 600. I write a report for each case, whether 16 it's Summit County or outside clients. All 17 those are on my database, the actual cases. So 18 I just go in my computer on my database where I 19 write the reports and tell them how many 20 reports I wrote for Summit County. So if I 21 write 600 reports, I did 600 cases. 22 Q. Okay. 23 A. Then I also go to my second 24 database, which is outside clients, the 25 forensic cases that we call police departments,</p>	<p style="text-align: right;">Page 117</p> <p>1 So is your report, is it basically 2 just the numeric findings or -- or lack of 3 findings, or do you actually have any narrative 4 discussion? 5 A. My -- my report is strictly a Word 6 document. Drug screen, you've got a copy of 7 it. I just tell you what I found. 8 Q. And then, is that information then 9 reentered into the system or -- 10 A. Yes, into the main system. My -- 11 my data and my report is originally in my 12 database on an individual computer in my lab, 13 because I'm not interfaced with the rest of the 14 office. 15 Q. Who else has access to that? Just 16 you? 17 A. Just me. 18 Q. And were you asked by the lawyers 19 to collect any of that information? Do you 20 know? 21 A. No. 22 Q. And if they asked you, you could 23 have made it available? 24 A. It's the same information that's on 25 the medical examiner's system.</p>

<p style="text-align: right;">Page 118</p> <p>1 Q. I thought -- I thought it got --</p> <p>2 some portion of it got input into the --</p> <p>3 A. All of it gets input into the ME's</p> <p>4 office system.</p> <p>5 Q. It has to be manually re-input?</p> <p>6 A. Yes. That's why we're getting a</p> <p>7 new system.</p> <p>8 Q. And how do you do quality control?</p> <p>9 A. Quality control in terms of what</p> <p>10 goes into the -- from one system into the</p> <p>11 other?</p> <p>12 Q. Yeah. I mean, some of these are --</p> <p>13 you know, right, it's, you know, amphetamine,</p> <p>14 125mg/ng ml, so someone has to take that entire</p> <p>15 tox screen that you do and then re-input the</p> <p>16 same information into another system?</p> <p>17 A. Correct.</p> <p>18 Q. Do you know if someone does a</p> <p>19 quality control to make sure --</p> <p>20 A. How do you know there's not a typo,</p> <p>21 that kind of stuff?</p> <p>22 Q. Yes, sir.</p> <p>23 A. Well, in theory, the -- we have the</p> <p>24 hard copy. That's my copy. And when</p> <p>25 Dr. Kohler or Dr. Sterbenz signs this stuff</p>	<p style="text-align: right;">Page 120</p> <p>1 Q. Right, right.</p> <p>2 A. -- in various storage facilities.</p> <p>3 Q. If someone said, "Mr. Perch, we'd</p> <p>4 like it," you'd say, "Have at it," right?</p> <p>5 A. I get requests all the time from</p> <p>6 attorneys.</p> <p>7 Q. From -- from outside attorneys,</p> <p>8 right?</p> <p>9 A. From outside attorneys that want to</p> <p>10 see everything I've done on a particular case</p> <p>11 that they're going after. And I make copies of</p> <p>12 everything and --</p> <p>13 Q. And you send it out?</p> <p>14 A. I send it out.</p> <p>15 Q. And that hasn't been done in this</p> <p>16 case, to your knowledge?</p> <p>17 MS. KEARSE: Object to form.</p> <p>18 A. As far as I know, no. But you have</p> <p>19 to be very specific on a particular case,</p> <p>20 obviously.</p> <p>21 Q. Understood. And so if you would be</p> <p>22 good enough to turn back to that annual report,</p> <p>23 and I'm going to ask you to look at page 18.</p> <p>24 It may help you to actually look at the two</p> <p>25 pages before that just so you kind of orient</p>
<p style="text-align: right;">Page 119</p> <p>1 out, they look -- they're on the computer, and</p> <p>2 they're comparing my copy with the actual copy</p> <p>3 that's notarized with the -- the information in</p> <p>4 the computer system.</p> <p>5 Q. I see. So when they actually do</p> <p>6 their work, they have a copy --</p> <p>7 A. They have a -- they have the entire</p> <p>8 file, yes, including -- you know, that's why it</p> <p>9 takes so long to sign out an autopsy -- one of</p> <p>10 the reasons it takes so long is they review all</p> <p>11 their files, all their -- the posts. They have</p> <p>12 all their notes, they have my copy of the tox.</p> <p>13 They have a lot of information there.</p> <p>14 Q. Is there anything in your system</p> <p>15 that's not given in to the tox -- I'm sorry --</p> <p>16 in to the folks who are doing the autopsies?</p> <p>17 A. Not in the sys- -- not in the</p> <p>18 computer. All I have in my computer is just a</p> <p>19 report. It's a Word document. There's a lot</p> <p>20 of information in my file, in the manila</p> <p>21 folder, that does not go anywhere.</p> <p>22 Q. And no one's collected that?</p> <p>23 A. There's thousands and thousands of</p> <p>24 cases for multiple years. No, it's all</p> <p>25 sitting --</p>	<p style="text-align: right;">Page 121</p> <p>1 yourself as to what section I'm talking about.</p> <p>2 A. Okay.</p> <p>3 Q. Am I correct that -- that this is</p> <p>4 a -- an annual report that's done by the</p> <p>5 medical examiner's office and it's posted on</p> <p>6 the website, and it's an outward-facing report</p> <p>7 for people in the community and others to rely</p> <p>8 on?</p> <p>9 MS. KEARSE: Object to form.</p> <p>10 And, Counsel, just for the record,</p> <p>11 it's not on the website. Just --</p> <p>12 MR. CHEFFO: None of these are</p> <p>13 posted on the website?</p> <p>14 MS. KEARSE: This? No.</p> <p>15 MR. CHEFFO: This 2015?</p> <p>16 MS. KEARSE: Yes.</p> <p>17 MR. CHEFFO: Okay. So --</p> <p>18 A. That, I don't -- I don't even know.</p> <p>19 Q. Okay.</p> <p>20 A. I don't look at our website.</p> <p>21 Q. I'll stand corrected.</p> <p>22 It's -- are these annual reports,</p> <p>23 in your experience, are they something that</p> <p>24 is -- are typically made available to the</p> <p>25 public?</p>

<p style="text-align: right;">Page 122</p> <p>1 A. As far as I know.</p> <p>2 Q. Do you have any reason why the 2016</p> <p>3 report would not be available to citizens?</p> <p>4 A. I have no idea.</p> <p>5 Q. And --</p> <p>6 MS. KEARSE: Object to form.</p> <p>7 Q. -- do you have any --</p> <p>8 MR. CHEFFO: Okay. So are they</p> <p>9 available to citizens or not?</p> <p>10 MS. KEARSE: No, and I'm just</p> <p>11 saying that you made a statement it was on the</p> <p>12 website. I -- we looked at the website. I did</p> <p>13 not see it on the website.</p> <p>14 MR. CHEFFO: Yeah. And I corrected</p> <p>15 it, and I asked him --</p> <p>16 MS. KEARSE: I'm not saying it's</p> <p>17 not available to citizens, but -- so that just</p> <p>18 did not -- so --</p> <p>19 Q. Do you know if this was available</p> <p>20 to citizens or not?</p> <p>21 A. Put it this way. We have a huge</p> <p>22 box full of these things. Whenever I have a</p> <p>23 tour or a student come in that's a -- you know,</p> <p>24 that -- you know, I do mentorships, all kinds</p> <p>25 of stuff. I always give them a nice copy of</p>	<p style="text-align: right;">Page 124</p> <p>1 A. No.</p> <p>2 Q. And you remember we talked about,</p> <p>3 in connection with your paper, that there were</p> <p>4 some other drugs that were commonly found that</p> <p>5 weren't listed amongst the five, right?</p> <p>6 A. Right.</p> <p>7 Q. And those would include citalopram.</p> <p>8 And I'm looking at 20.</p> <p>9 A. Yes.</p> <p>10 Q. And that's -- is that typically</p> <p>11 used in connection with suicides?</p> <p>12 A. No.</p> <p>13 Q. Okay. But it's -- it's common --</p> <p>14 and this is -- 20 is commonly found drugs that</p> <p>15 were not necessarily the cause of death but</p> <p>16 were found in a routine drug screen.</p> <p>17 A. You know, again, Pat did these.</p> <p>18 He -- I take that back. I would -- I would --</p> <p>19 got involved occasionally when he would ask me</p> <p>20 a question. And usually this -- it was the</p> <p>21 same question every year. It was the</p> <p>22 heroin/morphine question. How do you know it's</p> <p>23 heroin? And I would tell him you have to look</p> <p>24 both at the blood and the urine and to -- to</p> <p>25 connect the two to see if it's from heroin.</p>
<p style="text-align: right;">Page 123</p> <p>1 this because it's impressive for their little</p> <p>2 thing to go back to school with.</p> <p>3 Q. Right.</p> <p>4 A. You know, so there's no</p> <p>5 restrictions on me handing them out.</p> <p>6 Q. There's no -- there's nothing</p> <p>7 super-confidential about this, right?</p> <p>8 A. Not that I'm aware of.</p> <p>9 Q. So in this -- and again, right,</p> <p>10 we're talking about 2016, just to orient you.</p> <p>11 And in the "Toxicology" section. Then I'm</p> <p>12 going to just ask you, if you would, to look at</p> <p>13 page 18.</p> <p>14 A. Okay.</p> <p>15 Q. I think, from what you've told me,</p> <p>16 is that you don't personally categorize or</p> <p>17 quantify any of the data in Charts 20 and 21;</p> <p>18 is that right?</p> <p>19 A. Do I make these charts up?</p> <p>20 Q. Yes, sir. Better question.</p> <p>21 A. I do not.</p> <p>22 Q. Thank you. Is it something that</p> <p>23 you -- you're asked to participate in, other</p> <p>24 than what you explained to me earlier, which is</p> <p>25 that you just send a list of your cases?</p>	<p style="text-align: right;">Page 125</p> <p>1 It was always a matter of a</p> <p>2 technical nature in terms of how do I know how</p> <p>3 many heroin deaths? Or why he put citalopram,</p> <p>4 it's a very common if not the most common</p> <p>5 antidepressant out there, so I routinely see</p> <p>6 it. And it's -- and if these are deaths, it</p> <p>7 doesn't surprise me that it's part of the</p> <p>8 profile of the -- of the individuals. Another</p> <p>9 one that's very common is alprazolam, Xanax.</p> <p>10 I'm surprised that's not in there.</p> <p>11 Q. But -- but, you know, hydrocodone</p> <p>12 is, right?</p> <p>13 A. Correct.</p> <p>14 Q. Methadone is?</p> <p>15 A. Correct.</p> <p>16 Q. Oxycodone is?</p> <p>17 A. (Witness nodding head.)</p> <p>18 Q. But are you surprised that</p> <p>19 methamphetamines are not in here?</p> <p>20 A. Yes.</p> <p>21 Q. And particularly, right, when we</p> <p>22 look at the chart and the work that your</p> <p>23 coauthor did -- if I can find it -- right, when</p> <p>24 we have, for the last number of years,</p> <p>25 including 2016, it looks like, according to</p>

<p style="text-align: right;">Page 126</p> <p>1 this, that there was about 60 deaths related to 2 methamphetamines. 3 A. I don't know how he pulls up this 4 data. I really don't. And I rarely pay -- you 5 know, I don't pay attention to that stuff. 6 Q. Okay. And 21 talks about -- it 7 reflects the number of most commonly found 8 drugs that were determined to be the cause of 9 death. 10 A. 21? 11 Q. I'm sorry, sir. Figure 21, but on 12 the same page. 13 A. Oh. What was your question again? 14 Q. Absolutely. 21, and I just read 15 what it says here. It reflects the number of 16 most commonly found drugs that were determined 17 to be the cause of death, right? 18 A. That's what it says. 19 Q. And at least if we were to compare 20 the data in the article that you were a 21 coauthor -- and I think you have in front of 22 you, but I'm doing some -- kind of a -- 23 A. Yes, I see they have 24 methamphetamine in there. 25 Q. And it has about 60?</p>	<p style="text-align: right;">Page 128</p> <p>1 Q. -- the county? 2 A. Somebody screwed up. 3 Q. That's one explan- -- explanation 4 too. 5 Would you expect to have seen it in 6 prior years if, in fact, it was at the levels? 7 A. Here's the problem with some of 8 these searches. At least I'm prone to do this. 9 I create a search year one. If I screwed that 10 original search up, that template, chances are 11 year two I pull up the same template, the same 12 search and I just put in the new time frame. 13 So whatever the mistake was made initially is 14 going to be made the second time around and the 15 third time around. 16 And that's, again, I'm sorry, but 17 I'm guessing, because I haven't seen the 15 or 18 the 14 or any other of the other ones. 19 MS. KEARSE: And I was going to 20 say, again, we're not guessing. 21 THE WITNESS: Right. 22 A. So again, I am guessing, because it 23 should be there. I would think that it should 24 be there, obviously, based on -- so somebody's 25 data is wrong.</p>
<p style="text-align: right;">Page 127</p> <p>1 A. Correct. 2 Q. And yet someone decided that they 3 were going put 5 for citalopram, right? 4 MS. KEARSE: Object to form. 5 A. I have no idea why methamphetamine 6 is not there. 7 Q. Two for hydrocodone, right? All 8 right. And then eight for methadone. 9 So methamphetamine actually should 10 be right next to or very close to morphine, 11 right? In terms of if you were going to put a 12 bar for methamphetamine and have 60, it would 13 be pretty close to the morphine bar, right? 14 MS. KEARSE: Object to form. 15 If you know. 16 A. Well, at the very least, the 17 methamphetamine should have been on the top 18 graph. You know, it should have been there 19 somewhere. 20 Q. Are you aware, either formally or 21 informally, whether something like that 22 wouldn't be put in because somebody was 23 concerned about a stigma that some people might 24 think that there was meth use in -- 25 A. No.</p>	<p style="text-align: right;">Page 129</p> <p>1 Q. I mean, just based on your just 2 general -- and obviously I'm not asking you to 3 remember the number of cases -- but in 2016, 4 it's consistent with your recollection that it 5 was something -- 6 A. It should be there. 7 Q. -- close to the 60, right? 8 A. At the very least in the top graph, 9 drugs most commonly found that were not 10 necessarily the cause of death, but certainly 11 should be there. 12 Now, as far as the actual cause of 13 death, I'd have to look into each individual 14 case. 15 Q. Right. And again, I'm not going to 16 take up a lot of your time with this, 17 Mr. Perch, but we -- this is -- this is 18 actually the 2016 data, that -- that chart that 19 you have in front of you. 20 A. Okay. 21 Q. Right? And we could look at the 22 cause of death. 23 A. Okay. 24 Q. And I'll just -- I mean, like the 25 first one, right, says "Combined</p>

<p style="text-align: right;">Page 130</p> <p>1 methamphetamine." You know, I -- 1/5/2006 2 says, "Combined Fentanyl/methamphetamine 3 toxicity." 4 A. I agreed with you. It should be 5 there. 6 Q. Yeah. Yeah, I mean, my -- in my 7 recollection is that there was dozens, if not 8 more, that were classified. 9 A. Again, I don't know how he pulls 10 these searches up. Does he have to put each 11 individual drug in there and did he just not 12 put in methamphetamine for whatever reason? I 13 don't -- I really don't know. 14 Q. I take it you would agree with me 15 that to the extent that it was an inadvertent 16 error, that, you know, particularly when you're 17 working with important information and data 18 like this, it should be corrected if it was a 19 mistake? 20 A. Well -- 21 MS. KEARSE: Object to form. 22 A. -- I -- I would think so, but, you 23 know, that's not my area. 24 Q. Let me ask you just generally -- I 25 know this is not your specific, but, you know,</p>	<p style="text-align: right;">Page 132</p> <p>1 was the function of that? What does it do? 2 You know, to -- I know you're not a 3 computer expert, but what do you -- what do you 4 generally think that was for? 5 A. The investigators put in the 6 investigation report in there. They actually 7 typed -- they have their own template that they 8 type in all the investigative information. The 9 doctors put in their autopsy information in 10 there. 11 And obviously the toxicologist does 12 not put in his information directly, but one of 13 the secretaries does. And the reason -- there 14 are several reasons for that. Number one, I -- 15 I have to put in that data in a formal report 16 that I have to generate a hard copy. And the 17 format that Gillespie's computer system uses 18 does not generate the report I need. 19 So I generate a hard cop- -- that's 20 the official document, the official tox report. 21 When somebody requests an official tox report, 22 it's my report that I generate on a Word file. 23 That also goes into the autopsy file. 24 What's in the computer is basically 25 the same data. It's just a different format.</p>
<p style="text-align: right;">Page 131</p> <p>1 you have been there a long time -- in terms of 2 how data is kind of stored and managed, you 3 know, for the -- and I'm talking about the ME's 4 office. So you've told us a little bit about 5 you have a system that has kind of Word 6 versions, right, of tox reports, right? 7 A. Correct. 8 Q. And then you also have some paper 9 files, I take it, that are either intended to 10 do that or maybe were historic files? 11 A. If you're talking about my manila 12 folders -- 13 Q. Yes, sir. 14 A. -- that's where I store all the 15 hard copy of all my analysis. And this is what 16 the attorneys want. They want to review how I 17 did the analysis, the screening, the GC-MS, the 18 alcohol levels, the quality control that I run 19 with each assay. So, yes, that's important 20 data. 21 Q. Okay. And then there's a 22 centralized computer system or database, I 23 guess, that Mr. Gillespie developed? 24 A. Correct. 25 Q. And generally, what -- kind of what</p>	<p style="text-align: right;">Page 133</p> <p>1 So if you ever want to look up how much 2 oxycodone John Smith had, you put in the case 3 number and you pull it up on the computer and 4 that's all you see. But it's kind of an 5 incomplete picture, so to speak, as we -- as we 6 went through this. 7 Q. How -- how would you -- if you 8 were -- you talked about, from time to time you 9 testify. 10 A. I do. 11 Q. And I take it before you testify in 12 a -- in a case, you want to prepare yourself 13 for that testimony? 14 A. Well, yeah. I pull up the case and 15 review all the data, yes. 16 Q. All right. So when you say you 17 pull up the case and review all the data, 18 what's available to you in terms of the data 19 when you're preparing to testify in connection 20 with what's in the computer system? 21 A. I'm not sure what's in the computer 22 system. I don't look at it. 23 Q. Okay. 24 A. What's available to me is a copy of 25 my report that I generated, all the hard-copy</p>

<p style="text-align: right;">Page 134</p> <p>1 data from all the instrumentation that I use: 2 The immunoassay screen results, the GC-MS 3 results, the alcohol results, all that 4 documentation. 5 Q. Okay. Do you -- and that's what 6 you review because that's in your area of 7 expertise, right? 8 A. That is my area, yes. 9 Q. To the extent that there is other 10 information or testimony that's required about 11 a cause of death, that would typically be the 12 ME who would testify? 13 A. Yes. 14 Q. And this, to you, probably seems 15 like an extremely basic question, but I'm just 16 trying to understand how the process works a 17 little bit. 18 When you actually do a testing, 19 whether it's a -- gas spectrometer, is that 20 what it's called? 21 A. GC. 22 Q. -- GC or some of the other kind of 23 assays, does it kind of spit out, like, a 24 printout of those numbers, or is it on, like, a 25 digital screen and then you have to write it?</p>	<p style="text-align: right;">Page 136</p> <p>1 on a particular, let's say, over-the-counter 2 product if it's not on your -- your basic drug 3 screen? 4 And this may be on it, so I'll give 5 you an example. Like aspirin, right? You may 6 tell me that's part of your screening, so we'll 7 pick another example, but let's assume it 8 wasn't. 9 A. Okay. 10 Q. Right? And, you know, you run the 11 screen, person doesn't have a gunshot wound, 12 right, they're a younger person, and -- 13 A. So at that point, it's 14 undetermined. 15 Q. It's undetermined? 16 A. And I've already run the -- 17 Q. You don't see Fentanyl. You don't 18 see carfentanil. 19 A. No. 20 Q. You don't see cocaine. You know, 21 no gunshot wound. I suppose, right, in this 22 example, if they do an autopsy and they look at 23 the stomach, they might find, you know, a 24 bottle of pills. 25 But is there some way that you</p>
<p style="text-align: right;">Page 135</p> <p>1 A. Yes to all of the above. 2 Q. Depends on the test or instrument? 3 A. Depends on the test. For example, 4 a GC-MS quantitative run, you get a digital -- 5 you get a bunch of digital data. But remember, 6 I have a program in the computer where I've 7 generated a standard curve of known 8 concentrations based on a response factor. So 9 when I run my samples, it calculates the 10 unknown or the sample based on that standard 11 curve. 12 And, yes, it will print out a very 13 nice report that I've set up to a specific way. 14 So it generate- -- so it will tell you an 15 actual concentration, and in units that we're 16 comfortable with; for example, nanograms per 17 ml. It will give you the response factors. So 18 if a toxicologist wants to review my actual 19 data, he's going to want the response factors. 20 It will -- it will spit out a chromatogram, the 21 actual chromatography. So it will give you a 22 lot of information on those -- on those 23 reports. 24 Q. And how would you come to a 25 conclusion that someone, let's say, overdosed</p>	<p style="text-align: right;">Page 137</p> <p>1 would be looking for those types of common 2 non- -- typically non-toxic drugs or substances 3 that actually can have a high toxicity? 4 A. Yes. I have a lot of extra, 5 non-standard procedures that I can use. So 6 once I've run the gamut of all my standard 7 protocols, then I let it sit there for a week 8 and let me -- while I've got other cases to 9 work on, and I go back to it, and I may do an 10 OARRS report. I may look -- ask the 11 investigator to give me medical records and 12 look through medical records. There's a lot of 13 extra stuff I will have to do for those cases. 14 And they may take a lot more time. 15 But I do have -- you know, do I 16 want to look for heavy metals? Carbon 17 monoxide? Ethylene glycol? Those are 18 non-standard things that I will do. 19 Do I want to do them? No. But 20 again, you have -- every once in a while you 21 come up with a case that's -- that requires a 22 lot of extra work. 23 Q. Okay. And just to... 24 - - - - - 25 (Thereupon, Deposition Exhibit 4,</p>

<p style="text-align: right;">Page 138</p> <p>1 Document Titled "Annual Report, With 2 Five Year Statistical Trend, 2015," 3 SUMMIT_000022730 to 000022802, was 4 marked for purposes of 5 identification.) 6 - - - - - 7 Q. I think this is on the website, 8 though your good lawyers will correct me if I'm 9 wrong about this. 10 MS. KEARSE: I did see this one on 11 there. 12 MR. CHEFFO: Okay. There you go. 13 I'll -- lesson learned. 14 Q. You know where I'm going to ask you 15 to look. 16 A. That's where I'm going. Page 18. 17 Q. You're good getting there. I don't 18 even have -- you're doing my work for me here, 19 Mr. Perch. 20 A. See? 21 MS. KEARSE: Is this Exhibit 4? 22 MR. CHEFFO: Yeah. Four, yeah. 23 Q. So basically my question is, you 24 know, just to show you that it's in 2015. And 25 I guess one explanation may be that, like you</p>	<p style="text-align: right;">Page 140</p> <p>1 Q. Again, my guess is you're not going 2 to certainly remember a document off the top of 3 your head from 2007. 4 A. Not at all. 5 Q. And I don't see your name on it, so 6 it's not clear that you ever would have gotten 7 something like this, right? 8 A. I don't remember this at all. 9 Q. Okay. And I -- I really just want 10 to use it more illustratively to just ask some 11 general questions to orient you. 12 But you mentioned that from time to 13 time there are requests from lawyers, typically 14 plaintiffs' lawyers, right, seeking to bring 15 lawsuits against people for information, right? 16 A. Correct. 17 Q. And have you seen those letters? 18 Are they filtered down to you from time to 19 time? 20 A. They usually are addressed right to 21 me specifically requesting toxicology. And 22 sometimes there's 20 different points that they 23 want to address. The information on this or 24 that, you know, all that stuff. Maintenance 25 records, procedure manuals, et cetera, et</p>
<p style="text-align: right;">Page 139</p> <p>1 said earlier, there was just some kind of 2 search that was done that was carried over? 3 A. That would be my guess. 4 Q. But either way, it's not accurate, 5 right? 6 A. I highly doubt if it's accurate. 7 If you're missing a drug that should be there, 8 I -- you know, the data that's there for the 9 drugs that are there are probably accurate, 10 but, obviously, you can't be missing 11 methamphetamine. 12 Q. Right. 13 A. And, again, I think that's probably 14 what happened. 15 - - - - - 16 (Thereupon, Deposition Exhibit 5, 17 9/10/2007 Letter from James Orr to 18 Summit County Medical Examiner, With 19 Attachment, SUMMIT_000042195 to 20 000042198, was marked for purposes 21 of identification.) 22 - - - - - 23 Q. Tell me when you've had a chance to 24 look at this. 25 A. Okay.</p>	<p style="text-align: right;">Page 141</p> <p>1 cetera. 2 Q. Do you kind of physically respond? 3 You collect that information yourself, or do 4 you have a person who helps you with that? 5 A. I'm it. 6 Q. You also do that? And do you keep 7 a copy of those responses? 8 A. I make a copy that I sent -- one 9 copy I send to them. The other copy, I stick 10 it in my file. 11 Q. That's in your files today? 12 A. That's in my manila folder files. 13 Q. And those -- those weren't 14 collected, as far as you know? 15 MS. KEARSE: Object to form. 16 A. Collected how? 17 Q. Where the lawyer- -- do you know if 18 any of the lawyers in this case asked you for 19 access to those? 20 A. I don't think anybody asked me for 21 access to any -- access to any of my files? 22 Q. The manila files that you're 23 talking about. 24 THE WITNESS: Oh. Did you guys ask 25 me for any?</p>

<p style="text-align: right;">Page 142</p> <p>1 A. I don't -- I don't recall. 2 Nobody -- put it this way. I did not share any 3 of the files with anybody that I can recall. 4 Q. And you would have if you were 5 asked, right? 6 A. Yeah. 7 Q. And this person -- this goes back 8 to 2007, this letter. Do you see that? 9 A. I do. 10 Q. And it's from a Dallas law firm. 11 Are you familiar with them? 12 A. No. 13 Q. And they -- they want the autopsy 14 report and all toxicology reports. Do you see 15 that? 16 A. All toxicology reports and -- yes. 17 Q. And they are sending, right -- they 18 attached information that was provided to them 19 before that from the ME's office? 20 MS. KEARSE: Counsel, I think -- 21 you stated you were going to use this for a 22 different purpose. He's testified he's never 23 seen this document. 24 MR. CHEFFO: Okay. I note your 25 objection. Thanks.</p>	<p style="text-align: right;">Page 144</p> <p>1 people as long as -- as well as the results of 2 their -- their tox study and the cause of 3 death, right? 4 MS. KEARSE: Object to form. 5 A. Yes. 6 Q. Do you -- did you know -- strike 7 that. 8 Are you aware of whether there is a 9 policy or was a policy to disclose names of 10 decedents and this type of information to the 11 public? 12 MS. KEARSE: Object to form. 13 A. I don't know. 14 Q. But we know at least in this case, 15 right, that a law firm in Texas has all this 16 information, right? 17 MS. KEARSE: Object to form. 18 A. A law firm requested all this 19 information from Texas. 20 Q. And -- 21 A. Whether they have it or not, I 22 don't know. 23 Q. All right. 24 Do you know or do you have a 25 practice one way or the other, Mr. Perch, when</p>
<p style="text-align: right;">Page 143</p> <p>1 A. Yeah. 2 Q. Right? 3 MS. KEARSE: And now you're asking 4 him specifically about the document. It was 5 kind of the -- what -- how you represented to 6 the -- 7 MR. CHEFFO: That's fine. 8 MS. KEARSE: -- witness how you're 9 going to use it. 10 Q. Well, I'm going to ask you some 11 general questions. 12 This -- this looks like information 13 that is the type of information that's 14 maintained by the ME's office, right? 15 A. Yes. 16 Q. And it looks to me, and tell me if 17 this is consistent, that somebody from the ME's 18 office sent them a printout of people's names, 19 date of death, results, and cause of death, and 20 they basically took that and basically went 21 through it and said, "These are the specific 22 cases that I'd like more information about"? 23 A. That's what it appears to be, yes. 24 Q. And it also appears, right, that 25 they have the -- the actual names of these</p>	<p style="text-align: right;">Page 145</p> <p>1 you respond to these inquiries from lawyers, do 2 you redact or cross out any information, or do 3 you just send them this type of information? 4 A. Again, they're asking me on a 5 specific case, so obviously I need the name. 6 No, I don't redact anything. 7 Q. And is this the type of information 8 that you would provide? 9 A. No. 10 Q. What would you provide? 11 A. The actual data that I used to 12 get -- well, as I said, typically the attorneys 13 that request information from me want the 14 technical data. 15 Q. I see. 16 A. Obviously, a report -- a tox report 17 is just one sheet. Any -- you know, Pat would 18 do this. He would give them the autopsy 19 report, and the tox report is part of that 20 autopsy report. 21 When they request information from 22 me, they want a lot more. Typically they're 23 claiming -- again, the State of Ohio has very 24 specific standards, and they're going to claim 25 that I don't follow the standards. I don't</p>

<p style="text-align: right;">Page 146</p> <p>1 have a director's permit, for example. I don't 2 have a procedure manual. So they're going to 3 list all these points. They want to see all my 4 documentation to confirm all these different 5 areas that they're contesting. 6 Q. I see. And in this particular 7 case, at least, you know, 10 years ago, this 8 person, James Orr, looked like they were asking 9 for, quote "autopsy reports and tox reports," 10 right? 11 A. Correct. 12 Q. So if you were to receive something 13 like that, is it fair to say that you would 14 respond to the extent that it was toxicology 15 report-related, and then you'd pass it along or 16 somebody else? 17 A. I'd pass it right along off the 18 bat. I wouldn't mess with this. This would go 19 to Pat. 20 Q. This one is from 2007, Mr. Perch. 21 Do you remember if you had received these prior 22 to that? In other words, from the time that 23 you've been at the ME's office, as far back as 24 that, could you remember receiving, kind of, 25 requests like this? Lawyers' requests for</p>	<p style="text-align: right;">Page 148</p> <p>1 Q. Do you know about -- anything about 2 the practices of the other -- like the other 3 MEs, or the MEs? 4 A. I know the laboratory practices, 5 yes. 6 Q. And the document retention? I 7 mean, do they keep paper? 8 A. A lot of them don't. They'll keep 9 paper on the current cases, but a lot of it 10 is -- is digital now. 11 Q. And do you know if anyone other 12 than people who work in the ME's office review 13 or make decisions as to what information should 14 be responded to? 15 So, for example, to your knowledge, 16 does anyone call up the county legal 17 department, or are these handled typically -- 18 these requests for information, are they 19 typically handled internally by the department? 20 MS. KEARSE: Object to form. 21 A. I know that I run -- I get 22 subpoenaed constantly. Typically I will run -- 23 if it's not a local muni case, I'll run it 24 through our legal department, or certainly to 25 make them aware that I've got a subpoena for</p>
<p style="text-align: right;">Page 147</p> <p>1 information about cases? 2 MS. KEARSE: Object to form. 3 A. Do I remember? No. I'm assuming I 4 probably got requests. 5 Q. Okay. Is there a -- do you know if 6 there's a place where records go when 7 they're -- they're no longer needed for 8 immediate use, in terms of, like, you know, a 9 storage facility or something like that? 10 A. Yes, there is. 11 Q. Where is that? 12 A. No idea. 13 Q. Outside your area. 14 What -- is one of the 15 administrative folks, they make that decision? 16 A. Yes. Denise, our administrator. 17 Q. Now, with the -- those manila 18 files, I think you told us -- and correct me if 19 I'm getting this wrong -- that for homicides or 20 undetermined, there's a five-year statutory 21 requirement. 22 A. That's the actual samples. 23 Q. Okay. 24 A. The manila -- I have the manila 25 files for at least 10 years.</p>	<p style="text-align: right;">Page 149</p> <p>1 federal court in Cleveland, da-ta-da-ta-da. 2 Q. And who is the -- what office? Is 3 it a -- 4 A. Legal services. 5 Q. For Summit County? 6 A. Summit County. 7 Q. And is there a particular person 8 that supports that department? 9 A. Bob -- Bob something. 10 Q. Bob. Bob in legal services. 11 A. Bob. 12 Q. He's probably on your -- your cell 13 phone or something or other. 14 A. He's an attorney. Bob Hi- -- it 15 begins with an H. I can't remember his last 16 name. 17 Q. Okay. 18 A. We typically deal with e-mails, to 19 be honest with you. 20 Q. And do you -- do you know if -- if 21 people went through or did any searches on your 22 e-mails? 23 A. I think they did. 24 Q. And how do you know that? 25 And again, I don't want you telling</p>

<p style="text-align: right;">Page 150</p> <p>1 me anything that you talked to about your 2 lawyers, but -- 3 A. Yeah. You know, how do I know 4 that? I sat with one of them. 5 MS. KEARSE: And again, for 6 conversations with anyone from my office or 7 that they -- 8 THE WITNESS: Yeah. 9 MS. KEARSE -- you can't talk about 10 that. 11 A. And -- but I don't remember how -- 12 you know, I wasn't paying much attention. 13 You've got to remember, I'm a one-man 14 operation, and I'm just irritated because I'm 15 busy and all my work sits. 16 Q. Has there been -- have either you 17 suggested or others that someone should be 18 hired to supplement your work or help you? 19 A. Oh, absolutely. They -- we applied 20 for a grant to get me an assistant through 21 the Coverdell, but they denied us because they 22 said I didn't have a staff so they couldn't 23 give me an additional staff. It makes a lot of 24 sense, right? 25 Q. What about -- what about the</p>	<p style="text-align: right;">Page 152</p> <p>1 (Luncheon recess.) 2 THE VIDEOGRAPHER: We're back on 3 the record, 12:43. 4 MR. CHEFFO: We're back on the 5 record. Hopefully you had a chance to grab 6 some lunch. I think we're going to try and 7 move this as quickly as we can, Mr. Perch, and 8 I'll try to be respectful of your time. 9 BY MR. CHEFFO: 10 Q. Just want to ask a few questions on 11 a few different topics based on some, you know, 12 catch-up that I've done this morning. 13 But would you agree with me that 14 it's likely that heroin deaths, overdose 15 deaths, are underreported because of the 16 problems that you talked to us about earlier 17 about kind of differentiating between heroin 18 and morphine? 19 MS. KEARSE: Object to form. 20 Q. Do you understand my question? 21 A. Yeah. I -- not in Summit County. 22 Heroin deaths or overdoses? 23 Q. Well, let's talk with -- with 24 deaths. I mean -- and maybe we can just look 25 at this annual report for a minute, page 18,</p>
<p style="text-align: right;">Page 151</p> <p>1 county? 2 A. The county actually has an open 3 position, and they want me to give them a -- 4 about a year's notice before I retire so that 5 they can hire somebody for me to train. 6 Q. What about -- 7 A. But not as far as in the -- you 8 know, they don't want to hire an additional -- 9 you know, the county was hit hard with the 10 financial meltdown. If it wasn't for that 11 issue -- and it's taken us, what, eight years 12 to recover, and we're still not back to where 13 we were. You know, the real estate, it -- the 14 tax base just dropped out. And we're still 15 trying to recover. So it's tough to get 16 bodies. 17 We lost a number of bodies. I 18 mean, during that era, we actually took 19 non-paid days off. We had a choice of taking 20 non-paid days off or laying somebody off, so... 21 MR. CHEFFO: All right. Why don't 22 we take a few -- yeah, so let's go off the 23 record for a minute. 24 THE VIDEOGRAPHER: Off the record, 25 11:51.</p>	<p style="text-align: right;">Page 153</p> <p>1 just to guide us for a minute. 2 A. 2016? 3 Q. Yeah. So maybe "underreported" is 4 kind of not the right word to use, or maybe 5 it's under-classified. It's because, in other 6 words, if you look at 20 and 21, the charts on 7 Table 18, to the extent that they are -- the 8 drug is identified as a cause of death, it is 9 reported, but do you see that morphine is 65? 10 A. Correct. 11 Q. Right, and you see that heroin is 12 actually only 53? 13 A. Correct. 14 Q. And doesn't that strike you as not 15 correct? That it's more likely that heroin -- 16 people are overdosing on heroin use, not 17 morphine use; however, the way it's captured in 18 the tox reports, you're only able to determine 19 morphine? 20 MS. KEARSE: Object to form. 21 A. Well, that's one possibility. 22 Another possibility is the additional 12 deaths 23 was due to morphine sulphate. 24 Q. Okay. And like I say, I don't 25 have --</p>

<p style="text-align: right;">Page 154</p> <p>1 A. Prescription morphine.</p> <p>2 Q. Okay. And I don't have any</p> <p>3 visibility, right? So this is in your -- your</p> <p>4 kind of world.</p> <p>5 A. Yeah.</p> <p>6 Q. I'm just -- you know, from what you</p> <p>7 do -- and this is just last year or a year or</p> <p>8 so ago --</p> <p>9 A. Right.</p> <p>10 Q. -- you know, and again, you can't</p> <p>11 remember every single case, but do you remember</p> <p>12 believing that more people were actually -- the</p> <p>13 cause of their death was prescription morphine</p> <p>14 that they either got --</p> <p>15 A. No, no, no. The way I'm seeing</p> <p>16 this is 53 cases had heroin.</p> <p>17 Q. Yes, sir.</p> <p>18 A. 65 cases had morphine. 53 of those</p> <p>19 morphine cases are probably heroin.</p> <p>20 Q. I see. So this may be</p> <p>21 double-counting?</p> <p>22 A. You know, I -- statistics are</p> <p>23 funny. Me, in order to make a logical decision</p> <p>24 on what the cause of death is, I have to really</p> <p>25 look at the whole case, not a bar chart.</p>	<p style="text-align: right;">Page 156</p> <p>1 use one as an example. I don't think I'm going</p> <p>2 to ask you to go through every one. Let's --</p> <p>3 let me see if I can find one.</p> <p>4 A. Yeah. On the third page, there's a</p> <p>5 morphine. Acute mixed heroin is the cause of</p> <p>6 death. Alprazolam and oxycodone toxicity.</p> <p>7 Q. Right. Like, and that's my</p> <p>8 question, really, is let's look at the last</p> <p>9 two, 55281 --</p> <p>10 A. Uh-huh.</p> <p>11 Q. -- and then 55286. Do you see</p> <p>12 those?</p> <p>13 A. I see them.</p> <p>14 Q. So if we look at the tox results,</p> <p>15 it says "morphine (free)," in parentheses, on</p> <p>16 both of those.</p> <p>17 A. Right.</p> <p>18 Q. Right? So the tox results show</p> <p>19 morphine, but based on the analysis of the</p> <p>20 blood and the urine, you're able to determine</p> <p>21 it's actually heroin?</p> <p>22 A. Well, true, but I don't see the</p> <p>23 urine results here, so this is -- this report</p> <p>24 is incomplete, in my estimation.</p> <p>25 Q. Okay. And just for assumption or</p>
<p style="text-align: right;">Page 155</p> <p>1 Q. Okay.</p> <p>2 A. You know, as bad as it sounds, but</p> <p>3 this is probably the more accurate. This</p> <p>4 first --</p> <p>5 Q. Right. Exhibit 1.</p> <p>6 A. Exhibit 1 is probably a more</p> <p>7 accurate way of doing it because it tells you</p> <p>8 everything that was found there in both blood</p> <p>9 and urine, if there's both samples there.</p> <p>10 Q. I see.</p> <p>11 A. Again, bar charts are great to get</p> <p>12 a general feel of things, but once you try to</p> <p>13 start dissecting them individually, that's very</p> <p>14 difficult. There's multiple ways to interpret</p> <p>15 that.</p> <p>16 Q. Is it fair to say that you believe,</p> <p>17 and we could look at Exhibit 1, that many of</p> <p>18 the people who were overdosing and dying in</p> <p>19 2016 in Summit County are from heroin as</p> <p>20 opposed to initially ingesting morphine?</p> <p>21 A. I'd have to look at each case and</p> <p>22 actually do my own statistics. Looking at the</p> <p>23 first page, I don't see any heroin or morphine</p> <p>24 in there.</p> <p>25 Q. All right. Well, let's -- let's</p>	<p style="text-align: right;">Page 157</p> <p>1 argument's sake let's assume we had the urine,</p> <p>2 what would -- what would it need to show you in</p> <p>3 order for you to make a determination it was</p> <p>4 actually heroin as opposed to morphine?</p> <p>5 A. I'd have to see a heroin metabolite</p> <p>6 in the urine.</p> <p>7 Q. Okay. And --</p> <p>8 A. Now, that doesn't necessarily mean</p> <p>9 that there wasn't a combined heroin and</p> <p>10 morphine sulfate ingestion, but it sure does</p> <p>11 narrow it down quite a bit.</p> <p>12 Q. Right. And at least in those two</p> <p>13 cases, right, the medical examiner who signed</p> <p>14 off said that these were acute mixed heroin,</p> <p>15 right, and the next one says mixed heroin and</p> <p>16 Fentanyl. So it was either, presumably,</p> <p>17 Dr. Kohler or Dr. Sterbenz had --</p> <p>18 A. And they're looking for the same</p> <p>19 thing I'm looking for.</p> <p>20 Q. Right. So they were able to make a</p> <p>21 determination of heroin because presumably the</p> <p>22 urine analysis showed some type of metabolite</p> <p>23 that led them to believe it was heroin?</p> <p>24 MS. KEARSE: Object to form.</p> <p>25 A. That -- correct.</p>

<p style="text-align: right;">Page 158</p> <p>1 Q. So I guess for purposes of really 2 what I was just trying to ask you is that just 3 based on your general kind of recall and 4 experience, it would seem odd to you, right, 5 that more people actually died of morphine just 6 as kind of a stand-alone morphine than actually 7 heroin, based on the data and things we've just 8 looked at? 9 A. Well, again, it's difficult to 10 interpret bar graphs just based on what I'm 11 seeing here. 12 Q. Okay. Are there -- are there some 13 cases based on just the -- the limitations of 14 the testing instruments and time where you're 15 not able to make a determination that the 16 morphine is actually heroin? 17 A. Yeah. If I've only got blood and 18 no other -- and if the patient is badly 19 decomposed sometimes I only have tissue, I find 20 morphine. How do you determine that morphine's 21 from heroin or from morphine sulfate? Well, 22 again, you have to look at the bigger picture. 23 If they find a syringe with heroin in it next 24 to the body, that would certainly indicate that 25 it's from heroin.</p>	<p style="text-align: right;">Page 160</p> <p>1 numbers. 2 Q. But -- and fair point, and I 3 probably asked you, about you. But with 4 carfentanil, for example, it's -- you can do 5 the urine, and that gives you kind of a detect, 6 but you will then send it out for a 7 confirmatory blood test? 8 A. If I deem it necessary to get a -- 9 not a confirmatory. Quantitative. 10 Q. Quantitative. 11 A. If we feel that we need a number 12 and -- to show that it's in the blood, yes. 13 Q. Is -- are there situations where 14 you get a positive urine screen for 15 carfentanil, send it out for the blood, and it 16 comes back negative? 17 A. Have I ever got one like that? I 18 can't recall, but, I mean, it's possible to 19 happen, sure. But it's -- I haven't recalled 20 ever getting anything like that. 21 Q. Have you ever been asked to 22 quantify any costs or additional expenses that 23 might be incurred as a result of opioid-related 24 issues? 25 A. I think we had to justi- -- we had</p>
<p style="text-align: right;">Page 159</p> <p>1 Whether it's 100 percent accurate, 2 I don't know. That's up -- again, that's up to 3 the pathologist to determine that. But they do 4 have additional information. 5 Q. I see. And morphine -- I'm 6 sorry -- heroin and morphine is one example 7 where in order to get a full and complete 8 picture you need both blood and urine. Is that 9 also true for carfentanil? 10 A. With my limitations, I'm limited to 11 only being able to test carfentanil in the 12 urine, so it's kind of the opposite. I'm not 13 able to test the blood at all over a -- under 1 14 nanogram, and you're never going to see -- 15 well, I shouldn't say never, but rarely are you 16 ever going to see over 1 nanogram of 17 carfentanil in the blood. Typically you're 18 going to see 60 -- 50, 60, 70 picograms. So 19 it's just way too low for me to test the blood 20 for carfentanil. 21 So especially early on, when nobody 22 tested carfentanil at all, we were -- and the 23 first lab I had to test for it was in Columbus, 24 and they were only giving us positive and 25 negatives. They weren't even giving us</p>	<p style="text-align: right;">Page 161</p> <p>1 applied for a Coverdell grant, which is a 2 federal government grant for law enforcement. 3 That's my understanding. And one of the 4 reas- -- one of the ways I tried to justify it 5 was the workload increase from illicit drugs 6 and various drug overdoses in the last few 7 years. The cost of materials and supplies 8 increased. The cost of reference work 9 increased. The cost of -- the cost of my 10 equipment being constantly used and gases 11 involved, all that stuff, sure. 12 Q. And that -- that's different than 13 the other grant you told us about, the justice 14 grant that was declined. 15 A. That was a Coverdell grant. 16 Q. Oh, it's the same -- same grant? 17 A. For the -- for the -- trying to get 18 an extra employee? 19 Q. Yes, sir. 20 A. The same grant. 21 Q. The same grant. 22 A. It was a \$250,000 grant. 23 Q. I see. And that was the one that 24 was denied, but you were asking both for 25 additional person --</p>

<p style="text-align: right;">Page 162</p> <p>1 A. Personnel and equipment, yes.</p> <p>2 Q. -- and equipment, okay.</p> <p>3 Other than that, is there any other</p> <p>4 time that you've -- you've been asked to assign</p> <p>5 any kind of economic value or dollar figures to</p> <p>6 any extra work or expenses that you might have</p> <p>7 incurred?</p> <p>8 A. I probably did a similar thing for</p> <p>9 the county when I tried to get them to buy me</p> <p>10 equipment. You know, you have to justify --</p> <p>11 Q. Sure.</p> <p>12 A. -- them to -- the expenditures of</p> <p>13 the county to purchase equipment, et cetera.</p> <p>14 So I'm sure I probably wrote up a</p> <p>15 justification, and part of it was the increased</p> <p>16 workload, wear and tear on the instrumentation,</p> <p>17 et cetera.</p> <p>18 Q. In connection with your work for</p> <p>19 the police department, which I know is more</p> <p>20 limited than your full-time job, you told us</p> <p>21 that you're seeing kind of this year, I think</p> <p>22 you told us, cocaine, methamphetamine, and</p> <p>23 Fentanyl, right, in what you're seeing in the</p> <p>24 ME's office. Is that consistent with what</p> <p>25 you're seeing in connection with your work for</p>	<p style="text-align: right;">Page 164</p> <p>1 A. Locoweed. It's a plant that grows</p> <p>2 wild in all of Ohio, and it's a hallucinogen.</p> <p>3 We call it the poor man's LSD. So, I mean,</p> <p>4 there's always something.</p> <p>5 But again, at the ME's office it's</p> <p>6 a little different. I have to focus on things</p> <p>7 that are potentially lethal, so my scope is a</p> <p>8 lot narrower.</p> <p>9 Q. Right, right. So those -- those</p> <p>10 are -- it seems like there's kind of, with some</p> <p>11 frequency, new drugs or substance of abuse that</p> <p>12 are always entered into society. Some of them,</p> <p>13 like carfentanil, become particularly lethal;</p> <p>14 others may have a societal impact, but they</p> <p>15 don't often lead to death. Is that fair?</p> <p>16 A. Yeah.</p> <p>17 MS. KEARSE: Object to form.</p> <p>18 A. They rarely lead to death. They're</p> <p>19 really just a recreational use, similar to pot,</p> <p>20 in my opinion. You know, that's -- drugs of</p> <p>21 abuse have been around forever. You know, pot</p> <p>22 is number one still, so -- marijuana, cannabis,</p> <p>23 whatever you want to call it.</p> <p>24 Q. Uh-huh, uh-huh. And we haven't</p> <p>25 talked much about your work at the Oriana</p>
<p style="text-align: right;">Page 163</p> <p>1 the police department?</p> <p>2 A. Yeah, yeah. Yes, it is. Again,</p> <p>3 there we had so many more samples. As far as</p> <p>4 the hard drugs or the potentially lethal drugs,</p> <p>5 yes. We also get a ton of synthetic marijuana</p> <p>6 and all the synthetics, things that typically</p> <p>7 aren't lethal but are highly abused.</p> <p>8 Q. So, yeah, let's just talk about</p> <p>9 that for a minute. The drugs that are -- that</p> <p>10 are highly abused but not lethal, what would</p> <p>11 those include, in your view?</p> <p>12 A. The synthetics. Synthetic pot.</p> <p>13 You know, there's dozens of different forms of</p> <p>14 the synthetic marijuana. Then there's the</p> <p>15 bath -- quote, "the bath salts." There's a</p> <p>16 huge variety of those.</p> <p>17 There's always something new coming</p> <p>18 around. Kratom is a weed -- some kind of weed</p> <p>19 that people are drying and smoking now. I</p> <p>20 guess South America -- it came from South</p> <p>21 America, or at least the concept of using it,</p> <p>22 and that's becoming big.</p> <p>23 And I had a case where</p> <p>24 jimsonweed -- are you familiar with jimsonweed?</p> <p>25 Q. No.</p>	<p style="text-align: right;">Page 165</p> <p>1 House, other than I think, you know, you told</p> <p>2 us that you initially set up the lab in order</p> <p>3 to get some type of certification, which you</p> <p>4 were successful at getting.</p> <p>5 But can you just give us a little</p> <p>6 more insight as to your -- your general</p> <p>7 function and role there, what you do with them?</p> <p>8 A. I set up their quality control</p> <p>9 program. You know, this was a lab that does a</p> <p>10 lot of urine screens. Hundreds a day. It's an</p> <p>11 alternative-sentencing facility, so a lot of it</p> <p>12 is court-mandated. People that go in</p> <p>13 there that are drug abusers, traffic offenders</p> <p>14 or minor -- I should say minor offenders of the</p> <p>15 law, what have you, and they're court-mandated</p> <p>16 drug screening. So they do hundreds of samples</p> <p>17 a day. They have a huge analyzer. And all</p> <p>18 they do is strictly urine screens,</p> <p>19 positive/negative.</p> <p>20 Typically, they go in, they do a</p> <p>21 baseline on these clients or patients, and</p> <p>22 they're going to be positive because that's why</p> <p>23 they're in there. So they repeatedly test them</p> <p>24 every day or two until they go negative. Kind</p> <p>25 of reverse of what we do. So they start out</p>

<p style="text-align: right;">Page 166</p> <p>1 positive and they're -- they're supposed to 2 clean themselves up. And once they go 3 negative, then they're monitored again for a 4 period of time to ensure that they don't go 5 positive again or fall off the wagon. So 6 that's -- that's what they do typically at 7 Oriana House. 8 My role is to -- 9 Q. Is this -- is it inpatient or an 10 in- -- kind of live-in halfway house, or is 11 it -- 12 A. They do. They have all kinds. 13 They have some that are -- that go to work on a 14 work release program, some that get weekend 15 passes. But they do have in-house facilities. 16 They have a -- actually a jail that's staffed 17 by the sheriff's department. I'm not sure how 18 all that functions. 19 But my role is very limited. I 20 strictly deal with the laboratory to ensure 21 that they have reliable results and they're 22 done appropriately, documentation is kept up, 23 and all the standards are met for the CLIA 24 certification, meaning performance appraisals, 25 all kinds of stuff like that.</p>	<p style="text-align: right;">Page 168</p> <p>1 Now, if they suspect carfentanil or 2 Fentanyl, they can send it out. They use a 3 reference lab known as Redwood out on the West 4 Coast, somewhere in California. Redwood 5 Toxicology. And they can specifically order a 6 carfentanil or Fentanyl panel, Fentanyl 7 analogue panel. They -- they order -- and they 8 routinely order other drugs that aren't part of 9 their regular panel. 10 I want to say there was one that 11 they suspected that patients were abusing. It 12 was a laxative. I don't know why. But they 13 sent out quite a few of these samples to be 14 tested for laxatives. I forget the -- the 15 brand. So, yeah, they do have flexibility, but 16 they typically send it out. 17 Q. And so -- but the panel, again, if 18 you know or recall, but it would be alcohol, 19 you mentioned. I take it marijuana? 20 A. Alcohol, opiates, oxycodone. 21 Q. Would Fentanyl be on it? 22 A. It used to be. It was very 23 expensive. They weren't getting too many, so 24 they dropped that, and it's a referral now. 25 They send it out if they need it. And</p>
<p style="text-align: right;">Page 167</p> <p>1 Q. Is the -- is the urine screening 2 that they do the same that you do as kind of 3 your routine, or is it -- is it more kind of 4 focused on drugs of abuse? 5 A. It's very similar. Basically it's 6 a different analyzer, but it's the same juice, 7 so to speak, or the same reagent, the same 8 company, the same manufacturer. Siemens is 9 probably the number-one-used assay in the 10 United States, certainly. 11 Q. In both, I guess, for you and your 12 work at Summit County and -- and Oriana House, 13 what happens with something that's, you know, 14 more challenging to detect and monitor for, 15 like carfentanil, for example? 16 Now, I take the point that it's a 17 very dangerous drug, right, so many people who 18 abuse it could ultimately expire. But to the 19 extent that someone was abusing it in, let's 20 say, Oriana House, would that get captured? 21 A. No. Unless they have -- now, they 22 do have the flexi- -- they pretty much order 23 standard panels. They only test for five or 24 six drugs, and they're the typical drugs of 25 abuse, including alcohol.</p>	<p style="text-align: right;">Page 169</p> <p>1 amphetamines. THC is their biggie. And coke. 2 Q. Okay. And in your -- switching 3 back to Summit County for a minute in the 4 medical examiner's, I saw some reference to the 5 fact that, you know, these -- these kind of 6 Fentanyl analogues keep changing, carfentanil. 7 Do you -- does your initial screen, 8 to the extent that there was a new analogue 9 that came out, you know, kind of yesterday, 10 would -- would it capture it onto the Fentanyl 11 screen, or do you have to keep, like, updating 12 your -- 13 A. No. 14 Q. -- and chasing these -- these 15 drugs? 16 A. I couldn't. So what I ended up 17 doing was I would screen for carfentanil and 18 Fentanyl. And if I didn't confirm either of 19 those two, I'd send it out to a lab called 20 American Institute of Toxicology. And they had 21 a panel that probably had over a dozen 22 different analogs. And part of their role for 23 charging me 200 bucks was they were supposed to 24 maintain and be on top of what was out there. 25 Now, I had, again, a heads-up</p>

<p style="text-align: right;">Page 170</p> <p>1 working at APD. We knew what was out on the 2 street before the reference labs did. So I had 3 a good rapport with the toxicologist, and I 4 would tell him, I said, "Hey, we're seeing 5 4-methylfentanyl. Is that part of your panel?" 6 He goes, "Well, we're working on 7 it." 8 And I said, "Well, this sample I'm 9 sending you," you know, and I would write down 10 on the requisition, "I suspect 4-methylfentanyl," 11 so I want to make sure that they test for it. 12 And the reason I knew that is, again, the 13 paraphernalia and the residue and all that 14 stuff was so much easier to test for it. 15 Q. Uh-huh. Got it. 16 So -- so really, you know, some of 17 the -- I guess it's a good news/bad news story 18 in some regards. The bad news is it's 19 expensive, as these kind of analogues keep 20 getting created, that you have to use outside 21 labs because it's difficult, right? 22 A. Absolutely. 23 Q. The good news, I suppose, is at 24 least in the last year you've seen a 25 precipitous drop --</p>	<p style="text-align: right;">Page 172</p> <p>1 Q. Mr. Perch, what I want you to do, 2 if you would, is just take a look at it. And I 3 kind of -- I really just want you to 4 authenticate that and take a look at it and let 5 us know if that is, in fact, looks like a true 6 and correct copy of the Summit County Medical 7 Examiner Toxicology Policies and Procedure 8 Manual. 9 MS. KEARSE: This is six? 10 MR. CHEFFO: Six, yes. 11 A. It does. It does. 12 Q. And this one doesn't have page 13 numbers. Do you see that on the bottom? Do 14 you think there's a final version that actually 15 has pages? 16 A. I doubt it. You know what? 17 Actually -- well, maybe it does. I don't know. 18 When was this copied? 19 Q. You know, I -- this was produced to 20 us in the litigation. 21 A. Oh. 22 Q. You see those little numbers on the 23 bottom. So I believe that this came out of the 24 files of Summit County medical examiner, but I 25 don't have any more information than that.</p>
<p style="text-align: right;">Page 171</p> <p>1 A. I have. 2 Q. -- of these new analogues? 3 A. I have. 4 Q. I think you mentioned -- did you -- 5 did you say -- like, amphetamines, is 6 methamphetamine part of that -- 7 A. Yeah. 8 Q. -- Oriana? That's -- that's would 9 be included, right? 10 I think I just have a few more 11 questions, which will probably be the best news 12 you've heard all day. 13 So -- oh, actually, I have to 14 follow directions, too, so I'll have to just -- 15 we're going to spend, like, a minute on this 16 document. 17 - - - - - 18 (Thereupon, Deposition Exhibit 6, 19 Document Titled, "Summit County 20 Medical Examiner Toxicology Policies 21 and Procedures Manual, 22 SUMMIT_000048059 to 000048170, was 23 marked for purposes of 24 identification.) 25 - - - - -</p>	<p style="text-align: right;">Page 173</p> <p>1 A. You know, it's -- I'm wondering if 2 this is off of my template or something, off of 3 my -- I'm not sure. I'm surprised I don't have 4 my signature on some of these methods as well, 5 or the revised dates, et cetera. So this may 6 have been just out of, you know, the basic file 7 where I keep all the procedures. 8 Q. So you think that there might be a 9 more formal version of this document? 10 A. Well, it would be the same version. 11 You know, the main reason I keep this manual -- 12 I'm the only one there, I wrote it, I certainly 13 know the procedures -- is because I'm required 14 to by the state. 15 Q. But let me ask you this way, right. 16 If you had to produce it for a court hearing 17 that you were going to, right, you would 18 bring it -- would you bring this version, or 19 would you get something that -- 20 A. Well, I would -- I have an actual 21 manual that -- this isn't signed, and I'm sure 22 I have my signatures on it, so -- and chances 23 are it's identical to this, with the exception 24 of that, you know, my signatures are on -- are 25 not on here.</p>

<p style="text-align: right;">Page 174</p> <p>1 Q. If you need to lay your hands on 2 the more formal signed version, you could do 3 that, right? 4 A. Oh, yeah. It's sitting on my 5 counter. 6 Q. With respect to things like, you 7 know, calibrations and maybe test samples and 8 standard operating procedures that, you know, 9 you often see in a lab, is there a place that 10 you have those? Like, you know, here's my 11 routine of what I do in terms of testing this 12 machine or calibrating that one. Do you know 13 what I'm talking about? 14 A. Well, it's in the -- it's in -- 15 Q. It's in there? 16 A. Yes and no. Gas -- GC-MS, mass 17 spectrometry, there is a procedure here on how 18 to tune and run a mass spec. Now, you have to 19 remember, each batch of samples I run -- let's 20 say I run a batch of morphines. I have to run 21 three levels of controls: a negative, a low 22 positive, and a high positive. Then I run it 23 on my patients. So all that data and reports 24 are in each file. If I have six patients, I 25 make six copies of that whole run and put them</p>	<p style="text-align: right;">Page 176</p> <p>1 submit my results. I have a time frame I have 2 to submit it within, like 14 or 20 days or 3 whatever it is, and then they grade me. 4 And there's hundreds of labs that 5 perform the same survey, and they submit their 6 reports. And then I get a big, thick report 7 that shows how I did in relationship to 8 everybody else, if it was acceptable, if it 9 wasn't, how many standard deviations from the 10 mean was I, was I running low or high on that 11 particular analyte, did I miss something, did I 12 totally screw up and miss an analyte. So I get 13 graded in all kinds of categories. 14 And I have to pass all those 15 categories, and I have to send a copy of that 16 to the state, and that's how they renew my 17 license every year. 18 Q. I see. And if there's an area that 19 you missed or something, do you do it again? 20 A. If there's an analyte that I 21 missed, for example, if I screwed up on 22 morphine, I can't test for it until the next 23 two quarters. First of all, I have to write a 24 report on why I missed it, what kind of 25 corrective action did I take. And I can't test</p>
<p style="text-align: right;">Page 175</p> <p>1 in each patient's file. Because, again, 2 somebody is going to ask me for all that 3 information. 4 So that the calibration that you 5 talk of is really not a calibration. It's not 6 like a typical chemistry analyzer where you 7 calibrate with this and that. Mass spectrometry 8 is a little different. You calibrate what's 9 called a tune, and I do have all the tune 10 files. I've tune the instrument. Then I 11 validate the accuracy of the analyzer by 12 running quality control materials. 13 Q. Got it. That makes sense to me. 14 Thank you. 15 A. As well as I run national 16 proficiencies on a quarterly basis. That also 17 shows my reliability and accuracy of my 18 testing. 19 I get 10 samples that I subscribe. 20 It costs me about 2- -- 2- to \$3,000 a year 21 through the College of American Pathology, and 22 they send me 10 samples on a quarterly basis. 23 They're unknowns. I treat them as sample 24 patients -- patient samples. I analyze them. 25 I tell them what I find and how much I find. I</p>	<p style="text-align: right;">Page 177</p> <p>1 for that analyte until that I pass the next 2 survey, as well as writing up my -- 3 Q. Right. 4 A. -- documentation of what I did, 5 et cetera. 6 Q. Thank you. And I take it all of 7 those -- that back and forth, reports and 8 things, that's somewhere maintained in your 9 file? 10 A. Oh, yeah. I got every one of them. 11 As well as the state. The state has them all, 12 or should. 13 Q. And do you know if -- I mean, have 14 you, for the last 10 years, generally been in 15 compliance? 16 A. Yeah. I'm running every analyte. 17 The same thing for alcohols. I have to do the 18 exact same thing. That's a whole different 19 survey. 20 Q. The -- just one more kind of 21 housekeeping question. This is -- some of this 22 or much of this is probably very sophisticated 23 machinery. Is there -- is there kind of a 24 maintenance person or company or kind of 25 contract that you have that fixes things to the</p>

<p style="text-align: right;">Page 178</p> <p>1 extent that they need to be fixed?</p> <p>2 A. Yes. My screening analyzer is</p> <p>3 under -- it's -- I do a reagent rental on some</p> <p>4 of this equipment.</p> <p>5 THE REPORTER: It's called a what?</p> <p>6 A. It's called reagent rental. They</p> <p>7 provide me the instrument. They provide a</p> <p>8 service contract that includes a PM, and I just</p> <p>9 buy the reagent. Of course, they quadruple the</p> <p>10 cost of the reagent because they're going to</p> <p>11 recoup the cost of the analyzer over time. And</p> <p>12 we all know that up front.</p> <p>13 That's how hospitals do everything.</p> <p>14 They don't -- nobody buys equipment anymore for</p> <p>15 the typical analyzers. They -- they buy</p> <p>16 this -- the juice that the instruments need to</p> <p>17 run. And it's a lot more pricier, but on the</p> <p>18 other hand, technology moves so fast now, you</p> <p>19 pay \$100,000 for a piece of equipment, and it's</p> <p>20 outdated next year. So, when -- you know,</p> <p>21 when you -- versus you basically lease the</p> <p>22 equipment. They upgrade it every time there's</p> <p>23 a new revision. You've got their service</p> <p>24 people that charge 300 bucks an hour to come in</p> <p>25 normally, and -- you know, so it's all part of</p>	<p style="text-align: right;">Page 180</p> <p>1 bit about the differences in strength of some</p> <p>2 of these medicines or drugs.</p> <p>3 I've seen references that Fentanyl</p> <p>4 is 40 to 50 times, if not more, more powerful</p> <p>5 than heroin. Is that kind of in your range</p> <p>6 of -- does that sound about right?</p> <p>7 A. That's -- yeah.</p> <p>8 Q. And then --</p> <p>9 A. It depends on how much they've cut</p> <p>10 it. You can cut it and make it any</p> <p>11 concentration you want. Typically it's much</p> <p>12 more potent, yes. 40 to 50 times sounds good.</p> <p>13 Q. And -- and this sounds like a big</p> <p>14 number, but carfentanil is 10,000 times more</p> <p>15 potent than morphine?</p> <p>16 A. No.</p> <p>17 Q. Is it 1,000 times more?</p> <p>18 A. Here's an example. Yeah, it could</p> <p>19 be 1,000 times more.</p> <p>20 Q. I may have just written that</p> <p>21 down -- wrote it down, right. Now that I said</p> <p>22 it, I think -- I -- at least what I wrote was</p> <p>23 1,000.</p> <p>24 A. A lethal -- let's take a 100</p> <p>25 nanogram -- we're talking about the levels in</p>
<p style="text-align: right;">Page 179</p> <p>1 the -- the pricing mechanism. That's the most</p> <p>2 cost-effective way to do things.</p> <p>3 Q. Is there a company that you know a</p> <p>4 name that -- the name of a company?</p> <p>5 A. Yeah. Siemens is my --</p> <p>6 Q. Oh, Siemens is the company?</p> <p>7 A. -- is my company that -- for the</p> <p>8 immunoassay analyzer. I have it all through</p> <p>9 them.</p> <p>10 Agilent is the mass spec people. I</p> <p>11 have a service contract -- well, right now it's</p> <p>12 still under warranty on the new mass spec.</p> <p>13 That includes a PM.</p> <p>14 Q. I'm sorry. What's a PM?</p> <p>15 A. Preventative maintenance call.</p> <p>16 Q. Oh. Thank you.</p> <p>17 A. They come in and do all of the --</p> <p>18 Q. Sure.</p> <p>19 A. -- preventative maintenance call.</p> <p>20 And they give you records that they did all</p> <p>21 the -- all that. Which is Agilent. They used</p> <p>22 to be Hewlett-Packard. They spun it off.</p> <p>23 Q. Okay. Two more areas for you, then</p> <p>24 I -- then my colleagues may or may not have a</p> <p>25 question. But just want to ask you a little</p>	<p style="text-align: right;">Page 181</p> <p>1 blood, lethal levels. Let's say 100 nanograms</p> <p>2 per ml of morphine is potentially lethal in the</p> <p>3 blood. Fentanyl, 5 nanograms is potentially</p> <p>4 lethal in the blood. Carfentanil, .05</p> <p>5 nanograms is potentially lethal. So here a</p> <p>6 factor of 100, 10 -- about 1,000.</p> <p>7 Q. It's good to have friends,</p> <p>8 Mr. Perch, because my friend sitting next to me</p> <p>9 just handed me this document I should have</p> <p>10 showed you before, because I think this will</p> <p>11 confirm it.</p> <p>12 MR. CHEFFO: But let's just mark</p> <p>13 this, because I think this confirms what you</p> <p>14 just said.</p> <p>15 - - - - -</p> <p>16 (Thereupon, Deposition Exhibit 7,</p> <p>17 Document Titled, "Carfentanil and</p> <p>18 Current Opioid Trends in Summit</p> <p>19 County, Ohio," SUMMIT_000093982, was</p> <p>20 marked for purposes of</p> <p>21 identification.)</p> <p>22 - - - - -</p> <p>23 Q. So this, I think, is a presentation</p> <p>24 that was done kind of after your paper. Have</p> <p>25 you ever seen this document?</p>

<p style="text-align: right;">Page 182</p> <p>1 A. No.</p> <p>2 Q. Okay. Well, again, as with that,</p> <p>3 I'm not going to ask you --</p> <p>4 A. Oh, it's Kristy Waite again, huh.</p> <p>5 Q. Yeah.</p> <p>6 MS. ROITMAN: I have a Bates number</p> <p>7 for you. We'll put it on the record after.</p> <p>8 MS. KEARSE: Okay. And he just</p> <p>9 said he's never seen it before, so I just want</p> <p>10 to...</p> <p>11 A. At least I -- I don't recall. I</p> <p>12 may -- I may even have it.</p> <p>13 Q. Right.</p> <p>14 A. Kristy was pretty good about</p> <p>15 sending me all this stuff. I just never really</p> <p>16 paid much attention.</p> <p>17 Q. You know, your name is on the front</p> <p>18 page, right? So --</p> <p>19 A. Right, it is. So I should be</p> <p>20 familiar with it.</p> <p>21 Q. If you look at -- unfortunately,</p> <p>22 these don't seem to have page numbers. But I</p> <p>23 would look at one, two -- if you flip three</p> <p>24 pages. It says, "This is how we met the drug</p> <p>25 known as."</p>	<p style="text-align: right;">Page 184</p> <p>1 suicide. It could include things like</p> <p>2 accidental, malpractice-type claims, right?</p> <p>3 MS. KEARSE: Object to form.</p> <p>4 A. What was that again?</p> <p>5 Q. Sure. When we -- when we talk</p> <p>6 about -- when this talks about the number, 2009</p> <p>7 to 2016, the total drug overdose death cases</p> <p>8 was 1,065 --</p> <p>9 A. Okay.</p> <p>10 Q. -- drug overdose deaths, that would</p> <p>11 include things like suicides, right?</p> <p>12 A. Yeah.</p> <p>13 MS. KEARSE: Object to form.</p> <p>14 A. Any -- any form of overdose, I'm</p> <p>15 assuming.</p> <p>16 MS. KEARSE: Again, I'm going to</p> <p>17 direct the witness not to guess.</p> <p>18 MR. CHEFFO: I don't think he's</p> <p>19 guessing, but...</p> <p>20 Q. And it also --</p> <p>21 A. And again, I didn't write this.</p> <p>22 Q. No, I understand. I understand.</p> <p>23 And I'm just going to -- in the</p> <p>24 middle there it says the caseload rose from 70</p> <p>25 in 2009 to 264 in 2016, right? I think if you</p>
<p style="text-align: right;">Page 183</p> <p>1 A. "Materials and methods"?</p> <p>2 Q. I'm above that.</p> <p>3 A. Oh, above that. Okay.</p> <p>4 Q. So carfentanil is 100 times the</p> <p>5 strength of Fentanyl. This says 10,000,</p> <p>6 actually, times morphine. Is that possible or</p> <p>7 do you think it's more like --</p> <p>8 A. Let me calculate that here. Hang</p> <p>9 on a second. 100 times the strength of</p> <p>10 Fentanyl, which is true. And Fentanyl -- and</p> <p>11 100 times 100 is 10,000. Yeah.</p> <p>12 Q. And then --</p> <p>13 A. But that's in the pure form.</p> <p>14 Q. Understood. And it could be cut,</p> <p>15 right?</p> <p>16 A. Absolutely.</p> <p>17 Q. In different -- different ways.</p> <p>18 If you look at the "Results"</p> <p>19 section, which is, like, two more pages. This</p> <p>20 says from 2009 to 2016, the number of total</p> <p>21 drug overdose deaths was 1,065. Do you see</p> <p>22 that?</p> <p>23 A. I do.</p> <p>24 Q. Now, when we talk about total drug</p> <p>25 overdose deaths, that would include things like</p>	<p style="text-align: right;">Page 185</p> <p>1 flip to the next page, she's referring to that</p> <p>2 bar chart that we talked about a little bit</p> <p>3 earlier?</p> <p>4 A. Correct.</p> <p>5 Q. And again, I'm not going to ask</p> <p>6 lots of specific questions, but would you agree</p> <p>7 with me that the carfentanil deaths were</p> <p>8 largely in one time -- kind of point in time in</p> <p>9 2016 where you saw very significant deaths</p> <p>10 associated to carfentanil?</p> <p>11 A. No.</p> <p>12 Q. What -- did it occur after 2016?</p> <p>13 A. I will agree with you that it</p> <p>14 started in the 4th of July weekend of 2016 and</p> <p>15 just ballooned for the rest of 2016. It didn't</p> <p>16 get any better. It got worse. And then 2017</p> <p>17 was just as bad.</p> <p>18 Q. Okay.</p> <p>19 A. So that year and a half was</p> <p>20 carfentanil. It was, you know, basically the</p> <p>21 carfentanil epidemic.</p> <p>22 Now, prior to that, when I first</p> <p>23 started the coroner's office, as I mentioned</p> <p>24 before, I would see trends. You know,</p> <p>25 initially in the early 2000s, hydrocodone,</p>

<p style="text-align: right;">Page 186</p> <p>1 oxycodone, and that lasted for years. I mean, 2 you see peaks and valleys and spikes. 3 But typically what all I saw the 4 first 10 years at the coroner's office were 5 prescription meds. Very low levels of illicit 6 drugs in terms of lethal nature. Most of our 7 deaths -- and I don't have the statistics. 8 This is just the perception I had. 9 Q. Uh-huh. 10 A. The first 10 years I'm there. 11 Then, the last 10 years, I saw some 12 fluctuations. You know, the prescription -- as 13 I mentioned, we had pain management centers 14 back then, quite a few of them. As a matter of 15 fact, my last few years at City Hospital I 16 created a special drug test aimed at pain 17 management centers where I incorporated the 18 things that they wanted to see, which is the 19 opiates: oxycodone, hydrocodone, Fentanyl, 20 methadone, et cetera. And we called it the 21 pain management panel. 22 We originally created it for 23 St. Thomas Hospital. And after several weeks, 24 we were getting calls from Cleveland Clinic, 25 Aultman Hospital. Cleveland Clinic would have</p>	<p style="text-align: right;">Page 188</p> <p>1 want to ask you about -- I don't have 2017, so 2 thanks for that. You know, I didn't know what 3 the numbers would look like, but -- 4 A. Oh, they were -- they were bad. 5 Q. -- your -- your kind of rough 6 estimate would be that we would see a very 7 significant carfentanil -- 8 A. Correct. 9 Q. -- bar in 2017 if we had that data, 10 right? 11 A. Yes. 12 Q. Okay. But if we -- if we looked 13 basically from, you know, 2014, '15, '16, if we 14 were to take away carfentanil from 2016, it 15 would look not exact, but there would be -- in 16 terms of from these charts, the number of cases 17 would look similar, right? The driver of the 18 spike is, looking at this, is carfentanil? 19 A. Well, you got to remember, you got 20 to fill it with something. You got how many -- 21 you got 140 carfentanil addicts. They're going 22 to take something. So if carfentanil is not 23 available, something else will -- will be, so 24 to speak. So I'm not sure what it would look 25 like, but if -- you know, speaking exactly, if</p>
<p style="text-align: right;">Page 187</p> <p>1 a courier courier samples down to us twice a 2 day. So we were doing quite a bit of these 3 things, obviously because pain management was a 4 big deal back then. That was the first five, 5 ten years that that's what we were seeing. 6 The last ten years the prescription 7 meds started fading out and more of the illicit 8 drugs came into being. And I don't have the 9 exact time frame. That's why I'm giving you a 10 nice range. 11 Q. Uh-huh. 12 A. Again, we started seeing more 13 heroin, more Fentanyl, then a lot more 14 Fentanyl, and more methamphetamine. Coke was 15 always there. You know, small deviations, 16 always there. But the big increases that I 17 noticed in the last five years again was the 18 Fentanyl and the heroin, and all of a sudden 19 the carfentanil hit, and that just obliterated 20 everything. 21 Q. Uh-huh. 22 A. So that's the general time frame 23 that I saw. 24 Q. Okay. And let me just ask you, 25 then, because we'll come back to that. But I</p>	<p style="text-align: right;">Page 189</p> <p>1 you just take away the one bar, yes. 2 Q. So your view is addicts are going 3 to abuse virtually -- 4 A. They're going to find something, 5 you know. 6 Q. -- whatever is available. 7 A. Carfentanil disappeared, what did 8 we get a spike in? Fentanyl. 9 Q. Right. Or it could be this 10 weed that you talked about or some other new -- 11 MS. KEARSE: Object to form. 12 A. You know what? That's a party 13 drug. You know, partiers will smoke that. 14 Addicts, they're not into that stuff. 15 Q. Let me ask you about -- just 16 because you mentioned a little bit about the 17 prescription drugs. 18 There are many of these, actually, 19 other than Fentanyl, right, which can be a 20 prescription. But I think as we've talked 21 about, you know, the view, right, of Dr. Kohler 22 and you is that in at least the last, you know, 23 eight, ten years, that's not prescription 24 Fentanyl; that's illicit Fentanyl, right? 25 MS. KEARSE: Object to form.</p>

<p style="text-align: right;">Page 190</p> <p>1 A. The last how many years?</p> <p>2 Q. Eight to ten years.</p> <p>3 A. I would certainly say the last</p> <p>4 three or four. Prior to that, actually, you</p> <p>5 know, we saw quite a bit of prescription</p> <p>6 Fentanyl in terms of the patches.</p> <p>7 Q. Okay.</p> <p>8 A. I don't know how many times we</p> <p>9 saw -- and Dr. Sterbenz would be the best, or</p> <p>10 Dr. Kohler, but numerous times -- and they</p> <p>11 would give me a heads-up -- we saw several</p> <p>12 patches on this guy or they'd find it in their</p> <p>13 gut. You know, people were licking it or</p> <p>14 eating it, so we would find the actual</p> <p>15 Duragesic patch in their gut. So I saw quite a</p> <p>16 few of those.</p> <p>17 Q. And a question about that is, is</p> <p>18 it's obviously easy if you have something like</p> <p>19 heroin or cocaine -- other than if it's still</p> <p>20 used for some kind of nasal surgery, but</p> <p>21 assuming it's not -- or carfentanil, there's</p> <p>22 no -- there's no differentiation; they're not</p> <p>23 at all used for human purposes, right?</p> <p>24 A. Can I differentiate from</p> <p>25 pharmaceutical versus illicit? Are you -- was</p>	<p style="text-align: right;">Page 192</p> <p>1 took it out of somebody's medicine cabinet or</p> <p>2 they bought it on the street, right?</p> <p>3 A. No. I have no way of knowing any</p> <p>4 of that.</p> <p>5 MR. CHEFFO: I'm asking if anybody</p> <p>6 has anything before I do pass.</p> <p>7 MS. KEARSE: Why don't we take a</p> <p>8 break.</p> <p>9 MR. CHEFFO: Sure.</p> <p>10 THE VIDEOGRAPHER: Off the record,</p> <p>11 1:29.</p> <p>12 (A recess was taken.)</p> <p>13 - - - -</p> <p>14 (Thereupon, Deposition Exhibit 8,</p> <p>15 Screen Results for Case #49990,</p> <p>16 SUMMIT_000042349, was marked for</p> <p>17 purposes of identification.)</p> <p>18 - - - -</p> <p>19 THE VIDEOGRAPHER: We're back on</p> <p>20 the record, 1:47.</p> <p>21 EXAMINATION OF STEVE PERCH</p> <p>22 BY MR. EMCH:</p> <p>23 Q. Mr. Perch, a few questions for you,</p> <p>24 and I don't think we're going to take you into</p> <p>25 the length of the day here today.</p>
<p style="text-align: right;">Page 191</p> <p>1 that what your question was?</p> <p>2 Q. Yeah, I'm basically just saying</p> <p>3 that they're -- just because something is a</p> <p>4 prescription drug, right, it still can be --</p> <p>5 A. It's still the same drug.</p> <p>6 Q. -- abused also.</p> <p>7 A. Sure.</p> <p>8 MS. KEARSE: Object to form.</p> <p>9 Q. Right? It doesn't mean that the</p> <p>10 person -- like I said, if you found a Fentanyl</p> <p>11 patch in somebody's -- three or four of them or</p> <p>12 in their stomach or some other, that doesn't</p> <p>13 mean that they were prescribed and using it as</p> <p>14 directed, right?</p> <p>15 A. I would -- I would highly doubt</p> <p>16 that anybody is going to prescribe four patches</p> <p>17 at the same time. No, I'm sure it was being</p> <p>18 abused, sure.</p> <p>19 Q. All right. And there's really no</p> <p>20 way, from a toxicological perspective, to</p> <p>21 determine whether someone was prescribed -- so</p> <p>22 if you find oxycodone, for example, right,</p> <p>23 without more investigation, you can't just look</p> <p>24 at the tox studies and say this was a lawful</p> <p>25 oxycodone prescription for that person or they</p>	<p style="text-align: right;">Page 193</p> <p>1 If you go back to Exhibit 1, and</p> <p>2 also you've got -- you don't need to look at</p> <p>3 it, but you've got your toxicology manual there</p> <p>4 in front of you.</p> <p>5 Let me ask you first about the</p> <p>6 toxicology manual. Are there any other</p> <p>7 reference sources that -- and maybe you don't</p> <p>8 even need to look at the manual very often</p> <p>9 because you wrote it. But are there reference</p> <p>10 sources that you keep that are internal</p> <p>11 sources, like the toxicology manual, that you</p> <p>12 use routinely?</p> <p>13 A. Randall C. Baselt.</p> <p>14 Q. All right. And that's an outside</p> <p>15 reference, right?</p> <p>16 A. It's an outside book, yes.</p> <p>17 Q. So if I say the toxicology manual</p> <p>18 and Baselt, would those be the two things that</p> <p>19 you might look at most often?</p> <p>20 A. Yes. I rarely look at the</p> <p>21 toxicology manual. Baselt I look at all the</p> <p>22 time, as well as some of the other reference</p> <p>23 ranges I mentioned, Allegheny County coroner's</p> <p>24 office, as well as Chapel Hill coroner's</p> <p>25 office.</p>

<p style="text-align: right;">Page 194</p> <p>1 Q. But if we wanted to pull up one 2 that was as close to being, you know, the 3 standard thing or the -- the Blue Book, from 4 your perspective, that would be Baselt? 5 A. Yes. 6 Q. And the latest edition, you try to 7 keep the latest edition? 8 A. I do. 9 Q. And that's the one that's got 10 reference levels and things like that in it? 11 A. Correct. 12 Q. Now, you made some -- you made some 13 comments pretty quickly off the top of your 14 head. I mean, you have a lot of those -- those 15 numbers kind of top of the mind, anyway, 16 yourself? 17 A. Some drugs that I see constantly, 18 you remember. Drugs I don't see very often, 19 I'll have to pull up a reference. 20 Q. Okay. Now, back to Exhibit 1. The 21 first -- the top, first one, 55236 on 22 Exhibit 1, you talked about a little bit in 23 your testimony. And we talked about the fact 24 that the two were pulled out, methamphetamine 25 and Fentanyl, for the cause of death.</p>	<p style="text-align: right;">Page 196</p> <p>1 is what's listed here. 2 Q. Is there -- from a toxicology 3 standpoint, is there some kind of a 4 cross-reaction that exists between 5 methamphetamine and Fentanyl that you're aware 6 of that might cause them to interact in a way 7 that would bring about a death that's different 8 from other combinations of drugs? Do you know 9 what I'm asking? 10 A. Not that I'm aware of. 11 Q. Okay. And again, if we go to the 12 whole report and/or talk to the pathologist 13 about it, they would be able to explain why 14 they pulled those two out? 15 A. I would think so. 16 Q. Okay. The -- let's drop down to 17 the 5 -- 3 -- 55238. Do you see that one? 18 A. I do. 19 Q. Acute mixed-drug toxicity? 20 A. Correct. 21 Q. And just a little bit ago in 22 response to a question about -- I don't 23 remember what the question was about, but you 24 were -- you rattled off some levels that could 25 be lethal for some substances. I wrote down</p>
<p style="text-align: right;">Page 195</p> <p>1 A. Correct. 2 Q. Because it got four listed over 3 there on the right. And I -- I think you 4 mentioned that each of those four levels that 5 are in the tox results on that "Toxicology 6 Results" column were levels that could be 7 fatal. 8 A. Well, I meant three. The 9 amphetamine is actually a metabolite of 10 methamphetamine. 11 Q. Okay. 12 A. So I consider that together. 13 Q. All right. 14 A. And the oxycodone, of course, is 15 separate, and so is the Fentanyl. 16 Q. Now, methamphetamine and Fentanyl 17 that were pulled -- pulled out by the 18 pathologist and identified as the cause of 19 death in this particular instance -- and I 20 believe your testimony was if we want to try to 21 figure out how they came to that conclusion, 22 we'd need to go back and look at the full 23 autopsy record for that individual, right? 24 A. Well, I think I said you need to 25 ask the pathologist, assuming that the record</p>	<p style="text-align: right;">Page 197</p> <p>1 that you wrote Fentanyl, 5 nanograms per 2 milliliter? 3 A. Correct, yes. 4 Q. And -- 5 A. I do remember that. 6 Q. And carfentanil .05 nanograms? 7 A. Okay. 8 Q. And this is just information. 9 A. Right, right. 15 -- 50 picograms 10 of carfentanil, or .05 nanograms, yeah. 11 Q. So the list that's on this 55238 -- 12 A. Correct. 13 Q. -- acute mix-drug toxicity, 14 Fentanyl, 3.9, so, I mean, that would not hop 15 out at you as being an independently fatal 16 dose? 17 A. You have to look at the whole 18 picture. 19 Q. I'm with you. 20 A. By -- a number by itself, most 21 references are going to say Fentanyl 22 therapeutic is 1 to 3. That's therapeutic if 23 you're using a patch. 24 Now, the difference between using a 25 patch and an illicit drug is a patch is</p>

<p style="text-align: right;">Page 198</p> <p>1 designed so that it slowly infuses the drug 2 over a long period of time so you don't get 3 that bolus of drug into your system. 4 Now, the 3.9 by itself doesn't 5 look -- doesn't look that substantial. But we 6 don't know the route of ingestion. If he 7 injected it and then he -- and he lingers for 8 45 minutes and then he dies and we're getting a 9 sample after, a postmortem sample -- there's a 10 lot of other information, is my point, you need 11 to look at. Not just the number by itself. 12 But the number by -- the number by itself is 13 not that significant. 14 Q. Okay. The same kind of question on 15 methadone at 90 nanograms per milliliter. 16 A. The same answer. 17 Q. Okay. And for the other two as 18 well? 19 A. Correct. 20 Q. All right. So back again, we -- we 21 would need to look at the full record and/or 22 consult with the pathologist or see the report 23 in order to have an understanding or fuller 24 understanding of -- 25 A. In this particular case, yeah. On</p>	<p style="text-align: right;">Page 200</p> <p>1 Q. All right. The last one, which I 2 still can't pronounce. I've been trying to 3 practice on it, but I still can't get it. What 4 is it? Benzo -- 5 A. Benzoyllecgonine. 6 Q. And that is an indicator of -- 7 A. Cocaine. 8 Q. -- cocaine. It's a metabolite of 9 cocaine? 10 A. Correct. 11 Q. When one is looking at a level, in 12 Baselt for example, that he would write or she 13 would write is a range -- within a range for 14 being a fatal level, are metabolites treated 15 differently? 16 I mean, is it literally the same 17 kind of analysis in the sense that the 18 metabolite will show up in a certain range, and 19 if it's in that range, then you can say it 20 could suggest that it's fatal or therapeutic or 21 something else? 22 A. Depends -- 23 Q. Okay. 24 A. -- on the drug. Methamphetamine 25 and amphetamine, you're going to typically see</p>
<p style="text-align: right;">Page 199</p> <p>1 the case number one, where you got 14 nanograms 2 of Fentanyl, I don't have to look at anything 3 else. 4 Q. Right. That's far enough up in the 5 range that you know that -- 6 A. Yes. 7 Q. -- that's definitely fatal, okay. 8 On the 90 nanograms per milliliter 9 of methadone, am I correct that methadone is -- 10 that's a drug that is commonly utilized to 11 treat opioid addiction? Do I have that right 12 or -- 13 A. It is. 14 Q. And maybe you can't answer these 15 questions. I know it's pretty technical. 16 But if an individual were being 17 treated for opioid addiction and was taking 18 methadone at, say, a level of 15 to 20 19 milligrams per day, would that or could that 20 produce a 90 nanogram per milliliter level in 21 blood? 22 A. You have to remember there's a lot 23 more to it than just taking 15 to 20 milligrams 24 per day. I couldn't answer that in the context 25 that you asked.</p>	<p style="text-align: right;">Page 201</p> <p>1 a ratio -- this kind of ratio that you see up 2 on top. The parent compound -- again, the 3 levels tell you a lot more to the story. If 4 you're seeing a parent compound, the 5 methamphetamine, 10 times higher than the 6 metabolite, it's a fairly recent use, 7 et cetera, et cetera. 8 If you're seeing benzoyllecgonine at 9 less than 100 nanograms and no mention of 10 cocaine, the parent compound, it probably 11 wasn't a recent use. 12 And every drug is unique. Cocaine 13 is a bad example because cocaine undergoes 14 in vivo and in vitro degradation. Sitting on 15 the table in a tube of blood outside of the 16 body, it's going to degrade into 17 benzoyllecgonine. Most drugs don't. Most 18 drugs, the body -- you have to be alive to 19 break it down into its primary metabolite. 20 Cocaine you don't. It's sitting in the 21 refrigerator, it's going to break down. 22 You're not going to find too much 23 of the parent compound in a sample of blood 24 after a period of time. The bulk of it is 25 going to be broken down into benzoyllecgonine.</p>

<p style="text-align: right;">Page 202</p> <p>1 Again, it undergoes in vivo and in vitro 2 degradation. 3 Every drug is unique. You've got 4 to sort of look at each drug independently. 5 Q. Is heroin -- you gave a good 6 description of heroin and how -- how much time 7 it takes for that to break down. Does it break 8 down more, also, after -- 9 A. No. 10 Q. -- it's been taken? 11 A. No. 12 Q. That snapshot is going to be -- 13 A. That snapshot is pretty accurate at 14 the last -- right before the time of death. 15 Q. And what -- what is the lapse of 16 time that would be necessary for you not to be 17 able to find any more of the metabolite but 18 only be -- be finding morphine? Do you 19 understand my question? 20 A. Yeah. But remember, once a person 21 dies, the drugs that are in the urine are 22 there. They're not going anywhere. 23 Q. I understand. 24 A. So if he survives for, let's say, 25 two days, then he -- the cause of death wasn't</p>	<p style="text-align: right;">Page 204</p> <p>1 A. I will in the urine. 2 Q. In the urine. 3 A. Not in the blood. 4 Q. Not in the blood, okay. All right. 5 I think I understand, as an English -- 6 A. Unless there was a huge amount. 7 There's always exceptions. So -- but 8 typically, no, I shouldn't find morphine in the 9 blood. It's eliminated much more rapidly. 10 Q. Okay. When you were -- when you 11 talked about or rattled off a few of those 12 "this would be lethal" or "could be lethal" for 13 particular drugs, what's the number that you 14 would use for oxycodone? 15 A. You know, I don't use numbers. 16 That's for the reference manuals to use 17 numbers. Anything could be -- I mentioned this 18 numerous times. Any amount of drug could be 19 potentially lethal. You know, you got to look 20 at the individual. Is it a person -- 21 especially with tolerance. Especially with the 22 opioids. How tolerant is that individual? If 23 he's been a -- if he's been using oxycodone for 24 the last two, three years, a lethal level on me 25 is a normal level on him.</p>
<p style="text-align: right;">Page 203</p> <p>1 the heroin. 2 Q. Right. It would show up still -- 3 would it show after -- after two days, if 4 that's when you got the sample, would it show 5 up as morphine? 6 A. You're going to see everything 7 within that first 24-hour period. You're going 8 to see the metabolite and the morphine. The 9 body starts dumping this stuff right away and 10 it starts breaking it down right away. 11 My point being is if -- if the guy 12 survives for two days, and then I find heroin 13 and he dies two days later, it's highly 14 unlikely that the cause of death is going to be 15 the heroin. It doesn't take you two days to 16 die from a heroin overdose, is my point. 17 Q. I understand that. I'm just asking 18 if -- if a -- if a person were -- were using 19 heroin as well as other substances that they 20 were abusing. And let's say I took heroin two 21 days ago, a good bit of heroin. 22 A. Uh-huh. 23 Q. And then two days later I take a 24 bunch of other stuff and I die. Would you or 25 could you find morphine --</p>	<p style="text-align: right;">Page 205</p> <p>1 Q. Right. 2 A. You just can't use that single 3 number. 4 Q. And I do understand that, and I'm 5 not quarreling with it. I'm just saying, do 6 you have one in your mind that -- 7 MS. KEARSE: Object to form. 8 A. Do I have a number in my mind? Not 9 really. I mean, if it's under 100, I tend to 10 look at it as -- I tend to look at it as a 11 normal use kind of thing, but not -- you know, 12 again, I'm just answering you just for the sake 13 of answering you. 14 Q. You cannot -- 15 A. I don't do that. 16 Q. -- without a good picture of all of 17 the information, you're not going to be able to 18 make that kind of judgment. 19 A. That's right. 20 Q. And you can't make that kind of 21 judgment based just on this -- at least not 22 unless you've got something like Fentanyl at 23 14 -- 24 A. Right. Some you can, some you 25 can't. If the level is obviously toxic and</p>

<p style="text-align: right;">Page 206</p> <p>1 lethal, it is what it is.</p> <p>2 On the borderline cases, now you</p> <p>3 start really having to look at the additional</p> <p>4 data, especially the tolerance, history of use,</p> <p>5 that kind of information.</p> <p>6 Q. If you go to page 3 of Exhibit 1</p> <p>7 and go down to 55281. One up from the bottom.</p> <p>8 A. Uh-huh.</p> <p>9 Q. And this is, you know, why I was</p> <p>10 looking for that kind of number. It says acute</p> <p>11 mixed heroin, alprazolam, and oxycodone</p> <p>12 toxicity. And it's got a morphine level and</p> <p>13 oxycodone at 54 nanograms per milliliter,</p> <p>14 which, again, is an instance where -- at least,</p> <p>15 am I correct -- and you looking simply at this</p> <p>16 spreadsheet and at that number -- would call</p> <p>17 some question about whether oxycodone was at a</p> <p>18 level that could be lethal in that individual?</p> <p>19 A. Well, let me ask you that -- to</p> <p>20 rephrase that in a different way. Let's take</p> <p>21 away the morphine.</p> <p>22 Q. Uh-huh.</p> <p>23 A. And now all I have is oxycodone,</p> <p>24 now, alprazolam. Could that be lethal? It</p> <p>25 could. Again, if that's all the information I</p>	<p style="text-align: right;">Page 208</p> <p>1 call. I don't have it. And that's not my</p> <p>2 role.</p> <p>3 Q. And I'm -- I'm really not</p> <p>4 quarreling with that, but the morphine (free)</p> <p>5 at 305 nanograms per milliliter, do you have a</p> <p>6 high level of confidence that that could be a</p> <p>7 lethal dose?</p> <p>8 A. It could be.</p> <p>9 Q. Not the same level of confidence</p> <p>10 for oxycodone at 54?</p> <p>11 A. With oxycodone and alprazolam, I</p> <p>12 probably have to look at a lot more information</p> <p>13 if I -- if all I had was the free morphine at</p> <p>14 305, I'd -- I'd certainly have a higher level</p> <p>15 of confidence as that being the cause of death.</p> <p>16 Q. Okay.</p> <p>17 A. On the other hand, the one right</p> <p>18 below that, you got acute mixed heroin and</p> <p>19 Fentanyl toxicity. They're both sky high. You</p> <p>20 could have died from either one of those.</p> <p>21 Q. And "sky high" is probably the</p> <p>22 right terminology.</p> <p>23 A. They're both lethal, yes.</p> <p>24 MR. EMCH: Okay. Hand the witness</p> <p>25 what we have marked -- I think this has been</p>
<p style="text-align: right;">Page 207</p> <p>1 had, I'd have to look at the history. I'd have</p> <p>2 to look at a lot more information. Just</p> <p>3 because I have 305 nanograms of free morphine,</p> <p>4 obviously that's a high level and it's</p> <p>5 potentially lethal, but that doesn't make the</p> <p>6 same -- that doesn't mean to say that the rest</p> <p>7 of the drugs are not involved.</p> <p>8 Again, I don't make those calls.</p> <p>9 Q. Right.</p> <p>10 A. I just do the analysis.</p> <p>11 Q. But if -- if this one -- if that</p> <p>12 particular entry, the cause of death entry, had</p> <p>13 said, for example, acute morphine toxicity as</p> <p>14 the cause of death, would you have any basis,</p> <p>15 looking at those other two numbers, to disagree</p> <p>16 with that?</p> <p>17 A. Again, I -- I don't have the</p> <p>18 information that the pathologist has.</p> <p>19 Typically there's a reason why they do that. I</p> <p>20 just don't have that information.</p> <p>21 All I do is do the analysis and</p> <p>22 write down the numb- -- the numbers. It's up</p> <p>23 to them to interpret it. Because they have the</p> <p>24 history. They have the medical records. They</p> <p>25 have all the information necessary to make that</p>	<p style="text-align: right;">Page 209</p> <p>1 marked Exhibit 8; is that right?</p> <p>2 MS. KEARSE: Yeah, I think it's</p> <p>3 off. The realtime went off.</p> <p>4 (Off-the-record discussion.)</p> <p>5 THE VIDEOGRAPHER: We're off the</p> <p>6 record, 2:06.</p> <p>7 (Off-the-record discussion.)</p> <p>8 THE VIDEOGRAPHER: We're back on</p> <p>9 the record, 2:06.</p> <p>10 Q. I was curious about something else,</p> <p>11 and again, you may not be able to answer this</p> <p>12 at all. But do you have any idea of what kind</p> <p>13 of blood level of, let's say, morphine one</p> <p>14 might expect to find in an autopsy of, let's</p> <p>15 say, an end-of-life cancer patient who's been</p> <p>16 given very substantial doses of morphine during</p> <p>17 the past -- the last two weeks of their life,</p> <p>18 for example?</p> <p>19 A. Well, obviously I'd expect a fairly</p> <p>20 high level. What kind of level, I really don't</p> <p>21 know. We typically don't do a whole lot of tox</p> <p>22 on those kind of patients.</p> <p>23 Q. Okay. Back to Exhibit 8. Can you</p> <p>24 identify Exhibit 8?</p> <p>25 A. It looks like one of my reports.</p>


<p style="text-align: right;">Page 210</p> <p>1 Q. Now, just a few questions about it. 2 This is one of your reports. 3 A. Yes. 4 Q. And you've talked about your 5 reports a good bit in your testimony, starting 6 with you get a request from the pathologist to 7 do a screen or a toxicology report. 8 A. Correct. 9 Q. Is -- does this reflect that? Is 10 this the form, if you will, that you get? 11 I see at the top it's got "Specimen 12 Type" and some information up here with X's -- 13 A. No, this is -- this is the final 14 report that I generate when I'm done with 15 everything. 16 Q. All right. Does that top part 17 request -- does that show what was requested by 18 the pathologist up there to be done? 19 A. No. 20 Q. Okay. 21 A. It shows what kind of samples I 22 have to work with. And to tell -- well, I take 23 that back. Well, the "Testing Requested," they 24 typically just write "Tox." This is a default. 25 I automatically do ethanol and a drug screen.</p>	<p style="text-align: right;">Page 212</p> <p>1 them for an alcohol. Sometimes they'll order 2 just a drug screen or both. So that's -- 3 Again, this is a multiuse form. 4 And if they only order an ethanol, obviously I 5 don't include the drug screen blood and urine. 6 I could delete all that. The bottom statement 7 is strictly a default that's on every report. 8 It's not complete. I do a lot more testing 9 than this, so I try to be fairly general. 10 Q. Okay. So the screening could -- 11 probably has changed, gotten different over the 12 years? 13 A. The actual screen is much more 14 comprehensive. I would need another whole 15 sheet of paper just to list everything I screen 16 for and test for, et cetera. This is basically 17 just a default. 18 If you notice, blood and urine, 19 positive, confirmed, identified, quantitated. 20 Rather than listing everything, I just say what 21 was screened positive, will be -- will be 22 confirmed, and quantitative. 23 Q. And in the "Tested For" -- and this 24 is, again, a curiosity question -- the 25 volatiles that are listed, ethanol, methanol,</p>
<p style="text-align: right;">Page 211</p> <p>1 Q. Okay. Is this the Word document 2 that you referred to? 3 A. It is. 4 Q. So this form exists in your 5 computer and -- 6 A. It does. 7 Q. Okay. Do you -- and you may not be 8 able to give it any detail here, but is this 9 form in use now, number one? This version of 10 it that you're looking at? 11 A. It is. 12 Q. How long has that been -- 13 A. Forever. 14 Q. Really? 15 A. Since I started, I pretty much 16 haven't changed it. 17 Q. What about the -- the -- at the 18 bottom where it says "Tested For"? That's a 19 description of the screening that you've talked 20 about? 21 A. Yes and no. I use the same form 22 for police departments. And on -- on them, a 23 lot of times they'll just order an alcohol. So 24 up on the top where the "Testing Requested," I 25 just order ethanol. This way I only charge</p>	<p style="text-align: right;">Page 213</p> <p>1 isopropanol, are those -- which one is alcohol, 2 or are they -- 3 A. Ethanol is alcohol. 4 Q. Ethanol is always alcohol. 5 I've noted on some autopsy -- on 6 some of the computer runs that we've been 7 looking at in the cause of death, sometimes 8 they'll say alcohol, sometimes they'll say 9 ethanol. Technically, is it ethanol or -- 10 A. It should say ethanol. 11 Q. It should say ethanol every time? 12 But that would mean what we would all commonly 13 refer to as alcohol? 14 A. Yeah. What you would commonly 15 refer to as alcohol is a general term. Ethanol 16 is the appropriate term. Obviously methanol is 17 also an alcohol, but it's certainly much more 18 lethal and dangerous, and it also -- or 19 acetone -- again, the positive -- a positive 20 methanol or isopropyl alcohol mean different 21 things, as well as acetone. 22 You know, a diabetic, if I see 23 acetone, I -- the reason I test for these is 24 because, again, depending on what I find, I see 25 different -- different causes. A positive</p>

<p style="text-align: right;">Page 214</p> <p>1 acetone indicates a person that's diabetic. I 2 may pursue a glucose level on a diabetic. You 3 know, if I see acetone, he's throwing ketone 4 bodies in his urine, I'm going to think that 5 this guy has got a blood glucose of over 1,000. 6 Very high. That could be a cause of death. 7 So there's a reason for testing all 8 those different volatiles. But ethanol is the 9 one that I typically see. 10 Q. Okay. And I'll ask what I would 11 categorize as a stupid question, which is a 12 specialty for me. 13 Have you always tested for 14 methamphetamine? 15 A. Yes. Amphetamines is an -- is an 16 easy way of calling the entire group. It 17 should technically be called the 18 phenethylamines. The company calls 19 it amphetamines to encompass methamphetamine 20 and amphetamine and actually Phentermine. And 21 at one time it used to cross-react with a 22 couple of other things. But the newer 23 versions, within the last dozen or half a dozen 24 years or so, are very specific to 25 methamphetamine, amphetamine, and to some</p>	<p style="text-align: right;">Page 216</p> <p>1 eradicating the methamphetamine labs. And 2 then, you know, they're -- all of a sudden 3 they're -- 4 Who knows. The truth of it is I 5 see peaks and valleys of various drugs, and 6 when I talk about the return of meth -- I've 7 just seen another peak of methamphetamine 8 recently, meaning within the last four or five 9 months, maybe a little longer. Whether it was 10 known -- you know, I certainly talked about it. 11 I tell everybody, you know, and -- 12 and, you know, the toxicology in Ohio is -- and 13 pretty much everywhere, it's a small group of 14 people, so we chitchat all the time. I talk to 15 all my cohorts, whether it's in Columbus or 16 Cincinnati or Cleveland, and we have various 17 little meetings, and there's one coming up, and 18 typically, I will go to all these and we share 19 a lot of information. "What are you guys 20 seeing?" You know, "This is what we're seeing 21 down in Akron," et cetera, so. And currently 22 everybody in the state is kind of seeing very 23 similar things. 24 Q. Well, back to the annual reports 25 that you talked about that don't list</p>
<p style="text-align: right;">Page 215</p> <p>1 degree, ecstasy, or MDMA and MDA. 2 Q. Okay. When -- you discussed a lot 3 the big increase or the return of meth, I think 4 you -- 5 A. Uh-huh. 6 Q. -- or that it came back. I think 7 you may have referred to it that way. 8 A. I did something to that extent, 9 yeah. 10 Q. Was -- was that return of 11 methamphetamine as a driver or one of the 12 drivers of deaths by overdose in Summit County, 13 is that something that was known in the medical 14 examiner's office? By that I mean, was it 15 talked about? Was it an event, if you will, 16 that was -- 17 MS. KEARSE: Object to form. 18 Q. -- that was discussed? 19 A. Not that -- it wasn't that 20 significant. You know, you read the 21 newspapers, and Summit County had quite a few 22 meth labs, so to speak. And for a while there 23 I would read, oh, they busted another meth lab, 24 and then, you know, the police departments and 25 law enforcement would take a lot of credit for</p>	<p style="text-align: right;">Page 217</p> <p>1 methamphetamine. And I'm not suggesting that 2 this is necessarily the case at all, but we had 3 a little bit of testimony about this. 4 If there was a -- an actual 5 decision made to leave methamphetamine off of 6 the annual report with knowledge that, you 7 know, this is something that's happening here 8 and it's obviously important, if an actual 9 decision was made to leave it off with 10 knowledge that it was important, would Patrick 11 have made that decision himself, or is there 12 somebody else who would? 13 MS. KEARSE: Object to form. 14 A. I don't know. You know, for me, 15 this annual report is a waste of time. That's 16 the way I look at it. I hate -- I'm brutally 17 honest. 18 To Pat, it was his baby. You know, 19 he's a computer guy. And he would spend a lot 20 of time on doing this, and I'm thinking, "How 21 do you justify screwing around all that time 22 for doing that report that nobody looks at," to 23 be brutally honest. 24 So I don't -- I don't think there 25 was any intentional anything. He's not a tox</p>

<p style="text-align: right;">Page 218</p> <p>1 person. Me, I would instantly notice that. 2 I'm a tox person. Pat's a computer guy. The 3 data is only as good as the data you retrieve. 4 And I'm sure part -- the problem 5 was that he just fig- -- you know, I don't know 6 how he does his searches. I'm sure you have to 7 tell it what to look for. So if you don't tell 8 it to look for meth, you're not going to see 9 it. 10 And why he didn't, it could have 11 been partly my fault. I don't know. He asked 12 me a lot of stuff, and I tell him what to look 13 for. Maybe I completely forgot. If it was my 14 fault, I just don't know. 15 MR. EMCH: Okay. I'll pass. 16 EXAMINATION OF STEVE PERCH 17 BY MR. CARTER: 18 Q. Good afternoon. 19 A. Hi. 20 Q. We have not met. My name is Ed 21 Carter. Got a couple questions for you. 22 Because we've been going for a little bit. I'm 23 going to jump around. 24 A. Okay. 25 Q. Try to be as quick as possible. If</p>	<p style="text-align: right;">Page 220</p> <p>1 Q. Switching topics. 2 In terms of the information that's 3 in your tox report, there was an example marked 4 as Exhibit 8. You also talked earlier about 5 the manila folders and the hard raw data file 6 that you have? 7 A. Correct. 8 Q. If we wanted to see the various 9 things that you screened for, kind of the work 10 behind the final report, the only place we 11 could get that is the manila folder, right? 12 A. Correct. 13 Q. Okay. You mentioned how you set 14 up -- you were asked some questions about kind 15 of how the machines technically -- you know, 16 what they print out and what you're actually 17 looking at in terms of the raw data. You 18 described setting up a standard curve of known 19 concentrations based on response factor. Do 20 you recall that? 21 A. Yes. 22 Q. And then you said you combined that 23 with your gas chromatography-mass spectrometry 24 machine, and that's gives you the printout, 25 right?</p>
<p style="text-align: right;">Page 219</p> <p>1 in jumping around, you lose track of where I am 2 or have a question about what I'm asking for, 3 will you let me know? 4 A. Sure. 5 Q. Okay. You discussed a moment ago 6 the importance of tolerance, in addition to the 7 potency of a drug generally, the tolerance is 8 something you look at. 9 Do you agree that tolerance is a 10 key variable in trying to assess the lethality 11 of a drug dose? 12 MS. KEARSE: Object to form. 13 A. Depending on the concentration, 14 yes. 15 Q. And is it -- is it true that 16 there's no postmortem toxicology test you can 17 run to establish tolerance of a deceased 18 individual? 19 A. To establish tolerance? No. 20 Q. So is there a postmortem tox test 21 for tolerance? 22 A. Not that I'm aware of. 23 Q. Okay. Is there a postmortem tox 24 test for withdrawal? 25 A. Not that I'm aware of.</p>	<p style="text-align: right;">Page 221</p> <p>1 A. I run it. I run known 2 concentration standards on the GC-MS. The data 3 that that generates from my runs on that 4 instrument is stored in the computer. I tell 5 the computer run number one was -- and I'm 6 making these levels up -- 10 nanograms per ml 7 of morphine. Run No. 2 was 50. Run No. 3 was 8 100. Run No. 4 was whatever. And it will 9 generate a standard curve of response factors 10 for those five runs against the concentrations. 11 Then when I run my unknowns, it 12 takes my -- the response factor of my unknown 13 and goes, like a standard curve, goes along 14 until that response factor is calculated from 15 that standard curve, and it gives me a 16 concentration. 17 Q. Would those -- those run -- runs, 18 the data that comes from them, those standard 19 curves, would those all be included in the raw 20 data in your -- 21 A. Correct. 22 Q. -- manila folder file? 23 A. Correct. 24 Q. Are the runs that you put in, do 25 they vary from case to case, or do you have</p>

<p style="text-align: right;">Page 222</p> <p>1 kind of a standard set of parameters that you 2 typically use? 3 A. Rephrase that. 4 Q. Sure. If we compared five 5 different manila folders where you were 6 testing -- when you -- where you were running 7 the same panels, would the parameters that you 8 set up for each run, are those standard to you? 9 Are they things that you tweak over time? 10 A. Oh, I tweaked them over time. But 11 put it this way. I try to batch things as much 12 as possible. If you look at this case, I have 13 two different quantitative runs. Now, 14 obviously for qualitative, there is no standard 15 curve. But for quantitative, I'm going to have 16 a standard curve for benzoylecgonine and a 17 standard curve for oxycodone. 18 Now, I get a lot of cokes, so I 19 may -- in a week I may have six or seven 20 positive cocaines. I'll batch all those 21 patients together in one run. And by "one run" 22 I mean I'll run my three quality control 23 materials and the additional six patients, so I 24 have nine samples all together. I don't rerun 25 the standard curve every time, no. I use the</p>	<p style="text-align: right;">Page 224</p> <p>1 control runs, do you use one of those reference 2 sources that you set? You know, that you 3 talked about? What -- what causes you -- 4 A. I purchase -- I purchase my quality 5 control from a variety of sources. The 6 conventional drugs I purchase from a company 7 that's a worldwide company known as Bio-Rad. 8 Bio-Rad is the leader in quality control 9 material; typically for, certainly, all the 10 hospitals, but they do make a lot of forensic 11 controls. So for the routine stuff, the 12 morphine, they actually make a free morphine 13 control. Cocaine, the cokes, the 14 methamphetamines, et cetera, I purchase it from 15 Bio-Rad. 16 The Fentanyl's and some of the more 17 esoteric drugs are pretty much small, niched 18 kind of markets. I have to make -- I have to 19 get them custom made. They're very expensive. 20 So I get them custom made typically from a 21 company known as UTAC or Quality Assurance 22 Services. And again, I tell them what 23 concentration I want it in and what kind of 24 analytes I want in it, and it's basically a 25 freeze-dried material that you reconstitute,</p>
<p style="text-align: right;">Page 223</p> <p>1 same standard curve, and I use my quality 2 control material to validate that standard 3 curve, unless I change something drastically, 4 like an internal standard or a column or do 5 something to the instrument that's going to 6 negate, you know, my standard curve. My 7 standard curve I verify by running controls. 8 And my controls are assayed 9 material that have an acceptable level that 10 they have to fall within. So as long as that's 11 met, that's how I validate the rest of the 12 samples. 13 Q. In terms of the standard curves, 14 when you have a batch, let's say there's five 15 in the batch, if we go to those five manila 16 folders, will it have not only the results for 17 each of those runs, but something that shows 18 what that standard control, what the validation 19 results were for that? 20 A. Yeah. It will have -- it's in the 21 exact run. I actually photocopy everything, 22 the entire file, and stick it in each folder. 23 Q. And when you -- 24 A. So they'll be identical. 25 Q. Okay. When you set up those</p>	<p style="text-align: right;">Page 225</p> <p>1 and you get it, and it's made to the 2 specifications I give them. 3 Q. And so if I wanted to figure out 4 the data to kind of fully replicate what your 5 work process was, once again, that would all be 6 in the manila folder? 7 A. It's all in the manila folder. 8 Q. Okay. Then I will -- I will 9 short-circuit that series and just deal with 10 the manila folder on that. 11 A. Okay. 12 Q. Switching topics. 13 When you -- when you come across 14 contraband, is the practice to identify 15 visually and say, "Oh, you know, this looks 16 like everything else. We know what this is," 17 or do you still always test it to verify that 18 the substance is what it appears to be? 19 A. You know, do I test the contraband? 20 Is that what your question is? 21 Q. Yeah, like when you're working with 22 the PD. 23 A. When I'm working with the PD, 24 that's a whole different ball game. That's all 25 they do, so obviously you have to test all that</p>

<p style="text-align: right;">Page 226</p> <p>1 contraband. You have to test it. You have to 2 weigh it. And if there's six packets of the 3 same pill -- let's say there's 20 blister 4 packs, and each one has 20 pills in it, you 5 have to test one pill out of each blister pack. 6 So it's very monotonous, but it's very legal 7 and forensic kind of stuff. 8 Q. And in your experience, have you 9 seen instances where synthetic drugs are 10 manufactured to mimic other substances? 11 A. Yes. 12 Q. Have you seen U-47700? 13 A. Yes. 14 Q. And does that mimic oxycodone? 15 A. The actual visual pill? 16 Q. Yes. 17 A. I -- I haven't seen that. I've 18 seen U-477 in the -- 47770 in the analysis. 19 I've analyzed a couple of different samples 20 with U-47. I have not seen the actual 21 contraband. I mean, I guess it could. It can 22 mimic pretty much anything. 23 Q. Okay. Have you come across Xanax 24 laced with Fentanyl? 25 A. I've run across alprazolam and</p>	<p style="text-align: right;">Page 228</p> <p>1 BY MS. KEARSE: 2 Q. Okay, Mr. Perch. I just have a 3 couple of follow-up questions, and we've been 4 here for a good number of hours with that. 5 But just at the end of your 6 testimony, the court reporter finished and we 7 were done with your testimony, you turned to 8 counsel and you said you were just being 9 facetious about knowing that opioids had been 10 abused since you were 20 years old. 11 Do you recall that? 12 MR. CARTER: Form. 13 A. I do. 14 Q. Okay. And that was kind of an 15 off-the-cuff remark? 16 A. Yeah, yes. 17 Q. And did you -- did you learn about 18 the opioids and study opioids in toxicology 19 while you were studying in school? 20 A. Well, again -- 21 Q. For toxicologists? 22 A. -- it's my field. My field 23 requires me to, obviously, understand addiction 24 and tolerance and all those issues. 25 The point I was trying to make,</p>
<p style="text-align: right;">Page 227</p> <p>1 Fentanyl in patients. I don't know if it's 2 because it was laced with Fentanyl or if they 3 came from two different sources. Again, that's 4 all the contraband stuff. I don't do a whole 5 lot of that. Most -- the bulk of my work is 6 the biological specimens. 7 Q. Okay. All right. When -- 8 switching gears again. 9 When did you first understand that 10 prescription opioids could be abused and cause 11 death? 12 MS. KEARSE: Object to form. 13 A. When did I first learn of that? 14 Q. Yes. 15 A. When I was 20 years old. 16 MR. CARTER: Okay. All right. No 17 further questions. Thank you. 18 MS. KEARSE: Why don't we take a 19 break? 20 THE VIDEOGRAPHER: We're off the 21 record, 2:27. 22 (A recess was taken.) 23 THE VIDEOGRAPHER: We're back on 24 the record. The time is 2:40. 25 EXAMINATION OF STEVE PERCH</p>	<p style="text-align: right;">Page 229</p> <p>1 it's been a while. I've been in this field for 2 40 years, and obviously I know about that stuff 3 because that's my area of expertise. 4 Q. And -- appreciate that. Mr. Perch, 5 the -- Mr. Carter asked you some questions 6 about setting known concentration levels on 7 your immunoassays. Do you remember that -- 8 that question? Just the last line of 9 questioning? 10 A. The known -- 11 Q. Concentrations on your -- 12 A. -- on my immunoassay? 13 Q. Yes. 14 A. Yeah. 15 Q. I just want to be clear, that those 16 levels are to detect for the presence of a 17 chemical compound, correct? 18 A. Those are detection levels of how 19 much drug would turn up positive versus 20 negative; at what level it turns to positive 21 versus negative. 22 Q. It's not to detect any minimum 23 level related to the lethal dose of a drug, 24 correct? 25 MR. CARTER: Form.</p>

<p style="text-align: right;">Page 230</p> <p>1 A. No, it has nothing to do with 2 lethal levels. 3 MS. KEARSE: No further questions. 4 MR. CARTER: Just one followup. 5 EXAMINATION OF STEVE PERCH 6 BY MR. CARTER: 7 Q. Facetious or not, bottom line is 8 you've understood as long as you've been in 9 your field that prescription opioids could be 10 abused and cause death, fair? 11 MS. KEARSE: Object to form. 12 A. Fair. 13 MR. CARTER: No further questions. 14 THE VIDEOGRAPHER: Anything else? 15 We're off the record at 2:41. 16 (Deposition concluded at 2:41 p.m.) 17 ~ ~ ~ ~ 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 232</p> <p>1 REPORTER'S CERTIFICATE 2 The State of Ohio,) 3 SS: 4 County of Cuyahoga.) 5 6 I, Stephen J. DeBacco, a Notary 7 Public within and for the State of Ohio, duly 8 commissioned and qualified, do hereby certify 9 that the within named witness, STEVE PERCH, was 10 by me first duly sworn to testify the truth, 11 the whole truth and nothing but the truth in 12 the cause aforesaid; that the testimony then 13 given by the above-referenced witness was by me 14 reduced to stenotypy in the presence of said 15 witness; afterwards transcribed, and that the 16 foregoing is a true and correct transcription 17 of the testimony so given by the 18 above-referenced witness. 19 I do further certify that this 20 deposition was taken at the time and place in 21 the foregoing caption specified and was 22 completed without adjournment. 23 24 25</p>
<p style="text-align: right;">Page 231</p> <p>1 Whereupon, counsel was requested to give 2 instructions regarding the witness's review of 3 the transcript pursuant to the Civil Rules. 4 5 SIGNATURE: 6 Transcript review was requested pursuant to the 7 applicable Rules of Civil Procedure. 8 9 TRANSCRIPT DELIVERY: 10 Counsel was requested to give instructions 11 regarding delivery date of transcript. 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 233</p> <p>1 I do further certify that I am not 2 a relative, counsel or attorney for either 3 party, or otherwise interested in the event of 4 this action. 5 IN WITNESS WHEREOF, I have hereunto 6 set my hand and affixed my seal of office at 7 Cleveland, Ohio, on this 23rd day of 8 October, 2018. 9 10 11 12  13 14 Stephen J. DeBacco, Notary Public 15 within and for the State of Ohio 16 17 My commission expires September 30, 2022. 18 19 20 21 22 23 24 25</p>

<p style="text-align: right;">Page 234</p> <p>1 Veritext Legal Solutions 1100 Superior Ave 2 Suite 1820 3 Cleveland, Ohio 44114 4 Phone: 216-523-1313 5 6 October 23, 2018 7 To: Motley Rice LLC 8 9 Case Name: In Re: National Prescription Opiate Litigation v. 10 Veritext Reference Number: 3058687 11 12 Witness: Steve Perch Deposition Date: 10/18/2018 13 14 Dear Sir/Madam: 15 16 Enclosed please find a deposition transcript. Please have the witness 17 review the transcript and note any changes or corrections on the 18 included errata sheet, indicating the page, line number, change, and 19 the reason for the change. Have the witness' signature notarized and 20 forward the completed page(s) back to us at the Production address 21 shown 22 above, or email to production-midwest@veritext.com. 23 24 If the errata is not returned within thirty days of your receipt of 25 this letter, the reading and signing will be deemed waived. 26 27 Sincerely, 28 Production Department 29 30 NO NOTARY REQUIRED IN CA</p>	<p style="text-align: right;">Page 236</p> <p>1 DEPOSITION REVIEW 2 CERTIFICATION OF WITNESS 3 4 ASSIGNMENT REFERENCE NO: 3058687 5 CASE NAME: In Re: National Prescription Opiate Litigation v. 6 DATE OF DEPOSITION: 10/18/2018 7 WITNESS' NAME: Steve Perch 8 In accordance with the Rules of Civil 9 Procedure, I have read the entire transcript of 10 my testimony or it has been read to me. 11 I have listed my changes on the attached 12 Errata Sheet, listing page and line numbers as 13 well as the reason(s) for the change(s). 14 I request that these changes be entered 15 as part of the record of my testimony. 16 17 I have executed the Errata Sheet, as well 18 as this Certificate, and request and authorize 19 that both be appended to the transcript of my 20 testimony and be incorporated therein. 21 22 Date _____ Steve Perch 23 24 Sworn to and subscribed before me, a 25 Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that: They have read the transcript; They have listed all of their corrections in the appended Errata Sheet; They signed the foregoing Sworn Statement; and Their execution of this Statement is of their free act and deed. I have affixed my name and official seal this _____ day of _____, 20____. _____ Notary Public _____ Commission Expiration Date</p>
<p style="text-align: right;">Page 235</p> <p>1 DEPOSITION REVIEW 2 CERTIFICATION OF WITNESS 3 4 ASSIGNMENT REFERENCE NO: 3058687 5 CASE NAME: In Re: National Prescription Opiate Litigation v. 6 DATE OF DEPOSITION: 10/18/2018 7 WITNESS' NAME: Steve Perch 8 In accordance with the Rules of Civil 9 Procedure, I have read the entire transcript of 10 my testimony or it has been read to me. 11 I have made no changes to the testimony 12 as transcribed by the court reporter. 13 14 Date _____ Steve Perch 15 Sworn to and subscribed before me, a 16 Notary Public in and for the State and County, 17 the referenced witness did personally appear 18 and acknowledge that: 19 They have read the transcript; 20 They signed the foregoing Sworn 21 Statement; and 22 Their execution of this Statement is of 23 their free act and deed. 24 25 I have affixed my name and official seal 26 this _____ day of _____, 20____. 27 28 _____ 29 Notary Public 30 _____ 31 Commission Expiration Date</p>	<p style="text-align: right;">Page 237</p> <p>1 ERRATA SHEET 2 VERITEXT LEGAL SOLUTIONS MIDWEST 3 ASSIGNMENT NO: 10/18/2018 4 PAGE/LINE(S) / CHANGE /REASON 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____ 15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 Date _____ Steve Perch 21 SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ 22 DAY OF _____, 20____. 23 _____ 24 Notary Public 25 _____ Commission Expiration Date</p>

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF SEPTEMBER 1, 2016. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

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